

# National Economic Education Delegation

- **Vision**

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

- **Mission**

- NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.

- **NEED Presentations**

- Are **nonpartisan** and intended to reflect the consensus of the economics profession.



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# International Trade and the Pandemic: Gainers and Losers

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CIX 680 Exchange  
Walnut Creek, CA  
September 15, 2021



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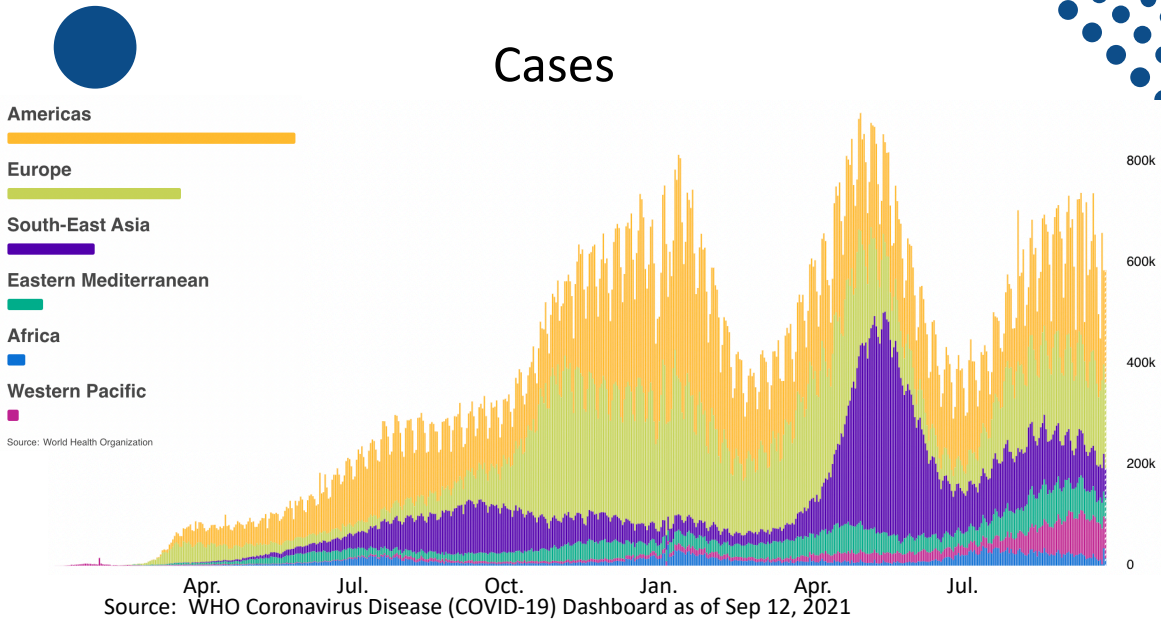
# Overview

## • Cases of the Pandemic

- Started in China
- Spread to the world in five waves, so far
- Hit
  - o The Americas and Europe especially hard
  - o Later, developing countries, esp. India
- Deaths surged early and then grew more slowly than cases as treatments improved

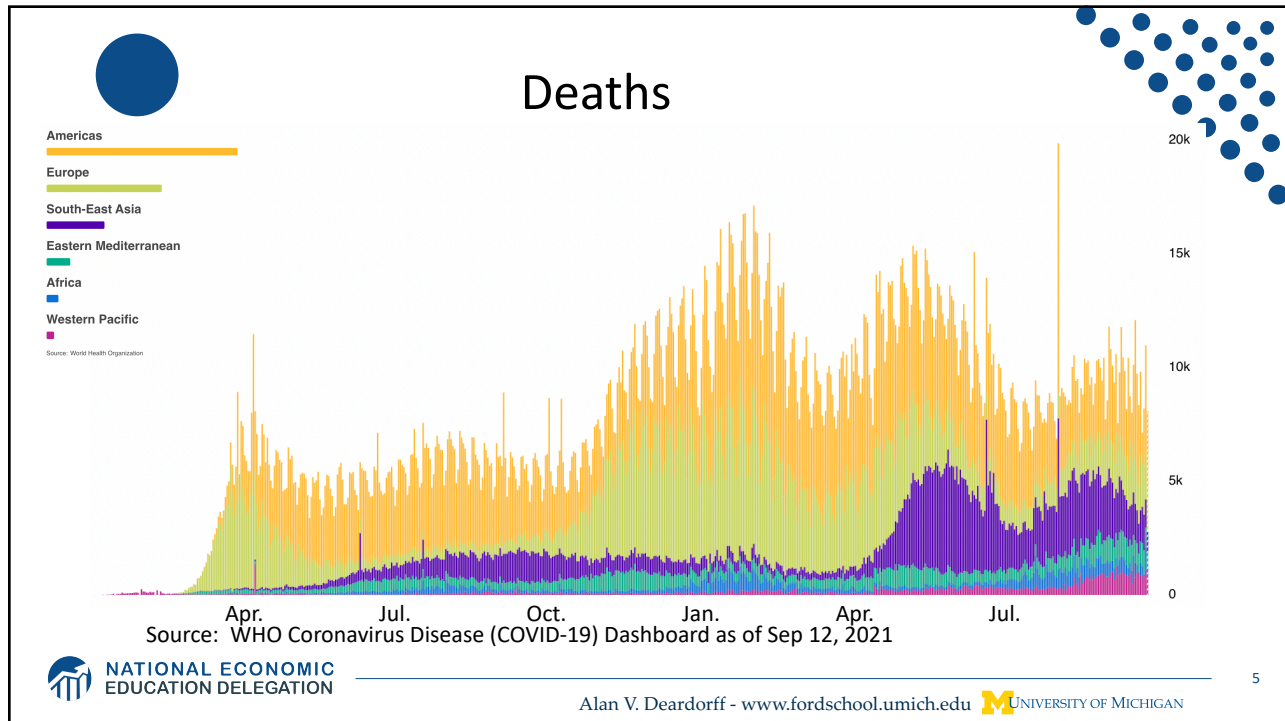
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# Cases



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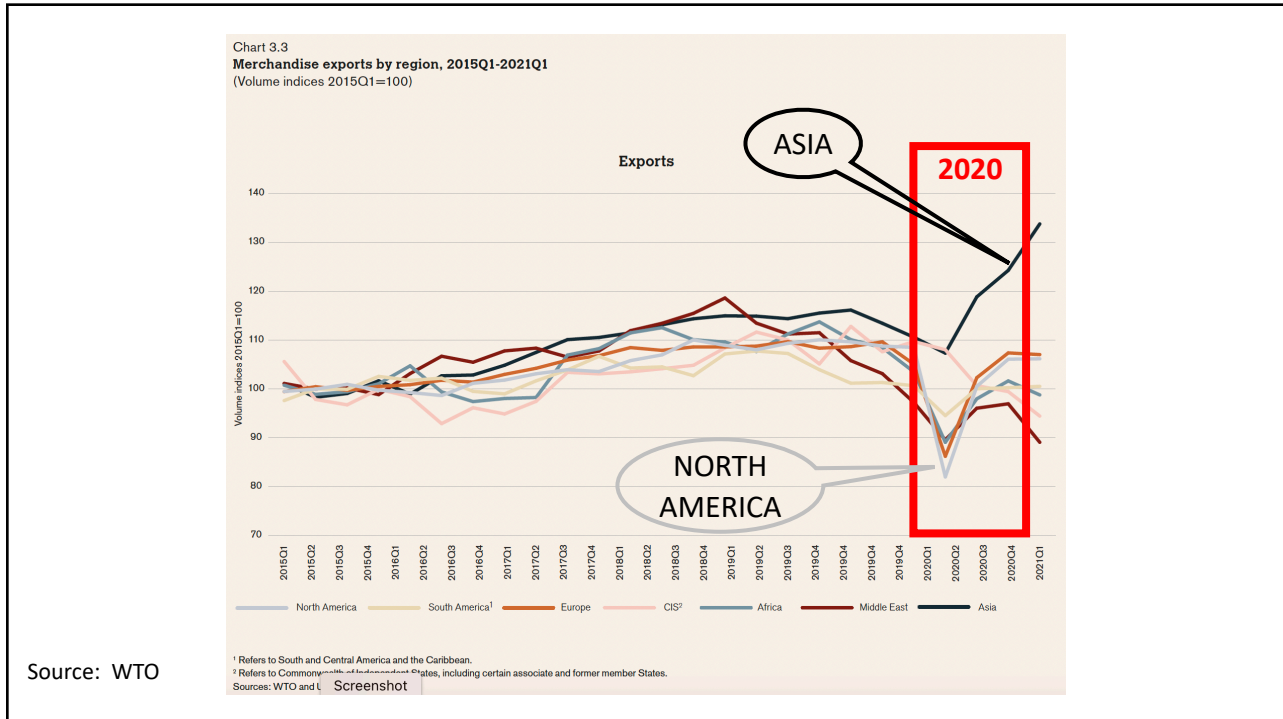
## Overview

- **What Happened to Trade**
  - International trade fell drastically
  - First for China
  - Then for the world, while China's trade rebounded
  - World trade has now mostly recovered

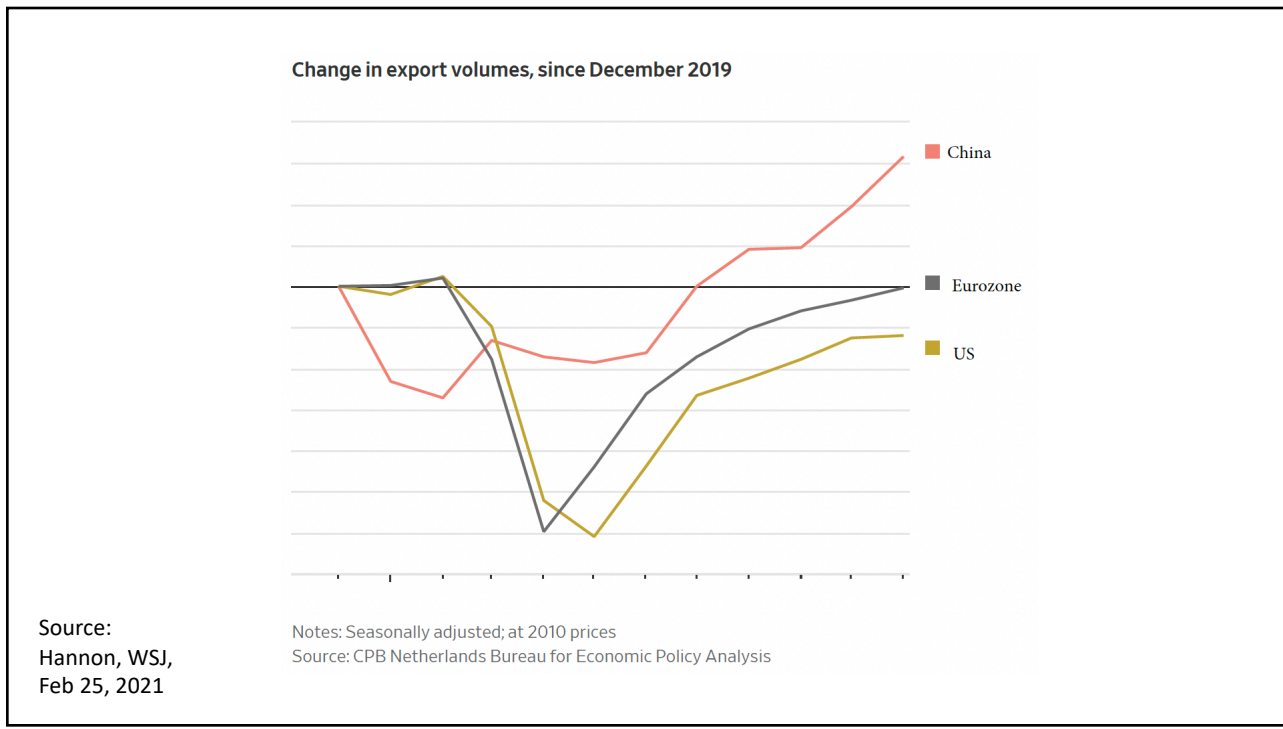
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# Overview

## • What Happened to Trade Policy

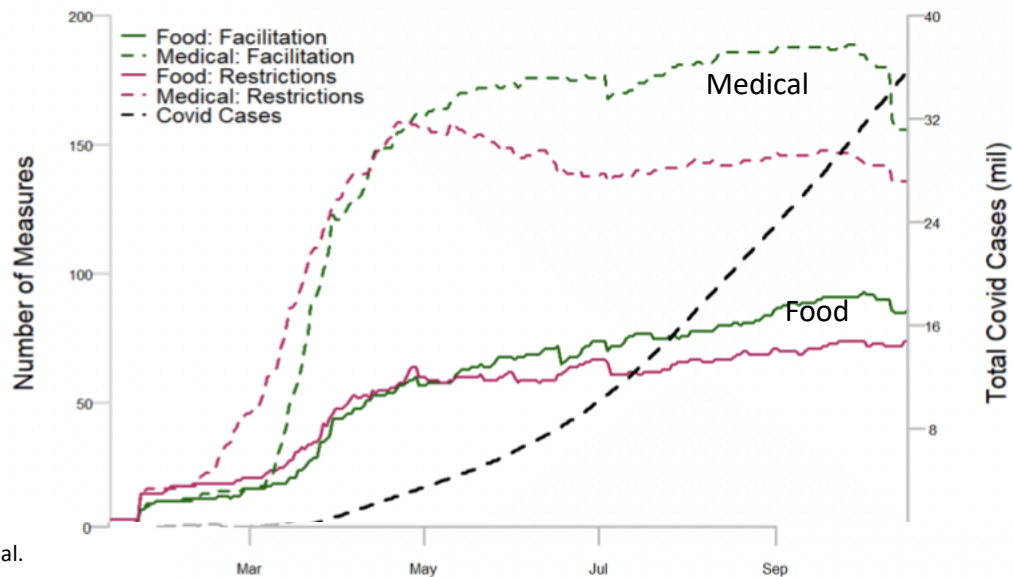
- Included both
  - Import facilitation, and
  - Export restriction
- Both highest for medical and high for food
- Facilitation was somewhat more common than restriction
- Both began before cases surged



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**Figure 1** Global COVID-19 cases and trade policy measures



Source: Evenett et al.

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## Overview

### Outline

- **Pros and Cons of Trade**
  - Globalization
  - Winners and losers from trade and trade policy
- **The Pandemic and Trade**
  - Did trade cause the pandemic?
  - How did trade matter for winners and losers?
- **The Pandemic and Trade Policies**
  - How did pandemic change trade policies
  - How did trade policies matter for winners and losers?



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# Trade Pros and Cons



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# Globalization

## • How and why trade has grown

- Trade grew, then fell, then grew vastly
- Tariffs and other barriers have fallen
- Both transport and communication have become cheaper

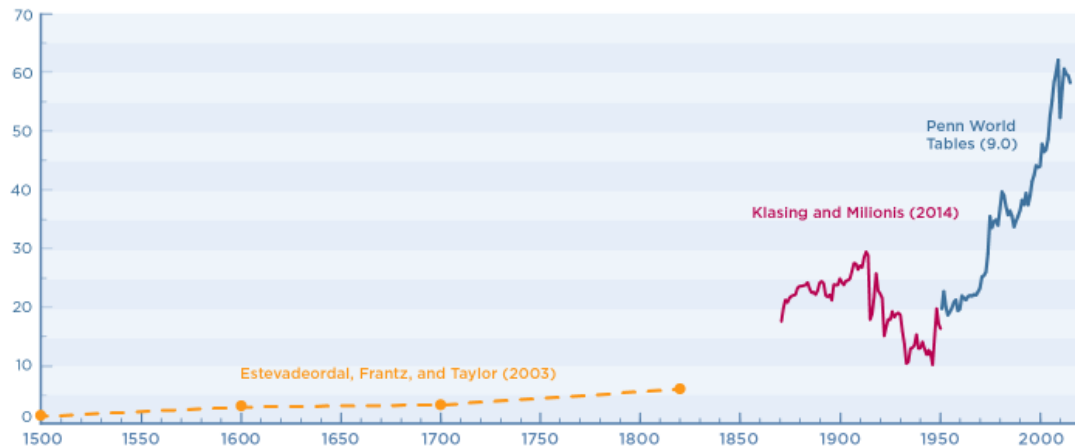


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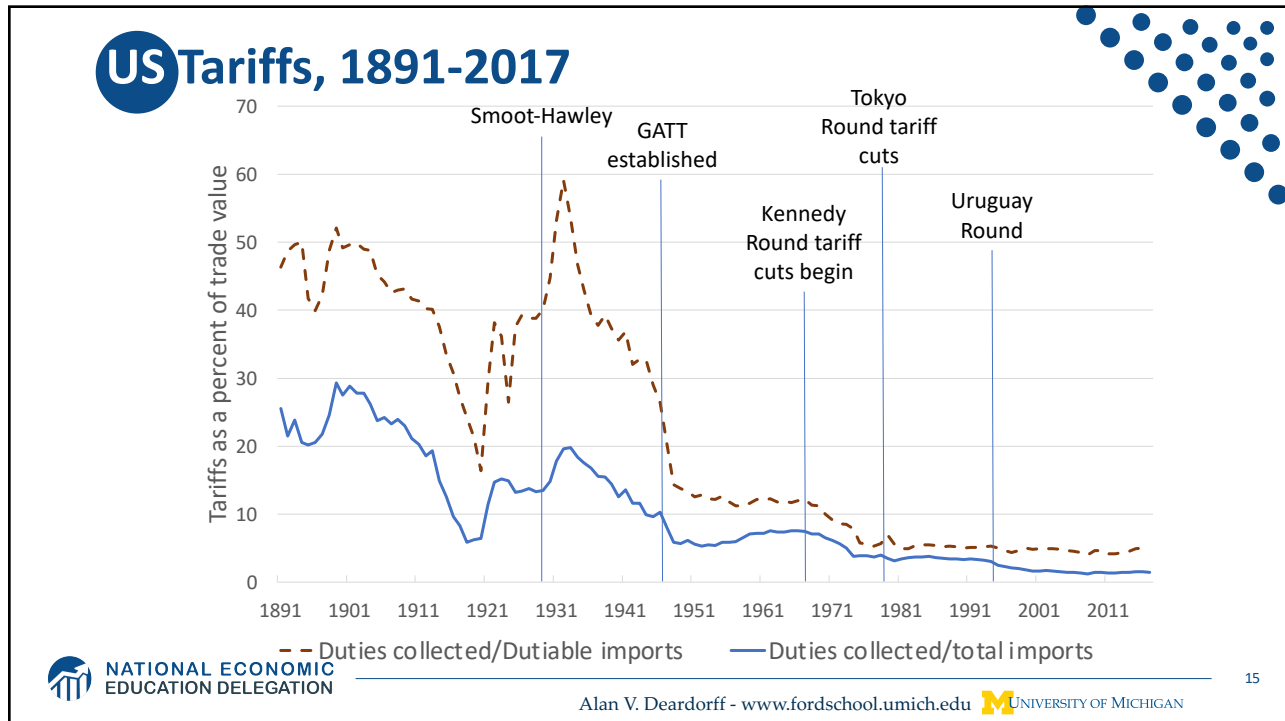
## Trade has skyrocketed in the past century

World trade as percent of world GDP (1500–2014)

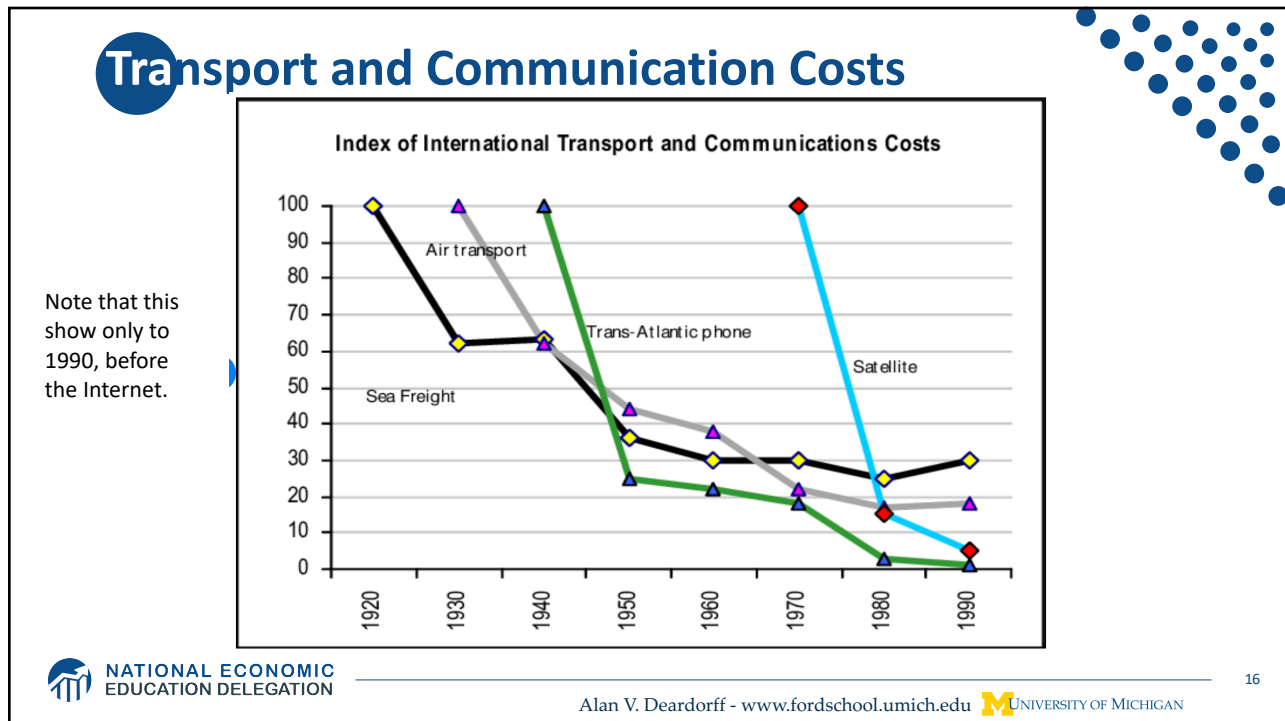


**Note:** This chart displays data from three sources. Data from 1500 to 1820 is the average of the upper and lower bound and only includes the years 1500, 1600, 1700, and 1820. Data not available from 1821-1869.  
**Sources:** See chart, "Globalization over 5 centuries," at <https://ourworldindata.org/trade-and-globalization> for full citations.

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## Pros and Cons of Trade

- **Pros**
  - Reduces cost-of-living world-wide
  - Fills shortages in some countries with others' surpluses
- **Cons**
  - Changes internationally hurt some while helping others
- **Economists' almost universal view: Pros > Cons**
  - Trade is beneficial overall for all countries
  - Trade restrictions are harmful
    - Tariffs on imports, export taxes
    - Bans on exports, imports
  - But there are always losers from changes in trade who need policies to help them

## Pros of Trade

- **Comparative advantage**
  - Source goods where relative costs are lowest
  - Each country produces and exports what they do best
  - Costs and prices fall world-wide
- **Increased competition**
  - More firms compete, reducing monopoly pricing
- **Economies of large-scale production**
  - With larger markets firms reap economies of scale
  - Costs fall

## Pros of Trade

- **Access to greater variety**
  - Products can be better-tailored to users needs
  - Consumers get what they want most
  - Producers get what they need most
- **Increased productivity**
  - Firms learn state-of-the-art technologies from foreign firms
  - Most productive firms expand while others contract

## Cons of Trade

- **Changes in trade (up or down) disrupt**
  - Businesses
  - Jobs
  - Communities that lose factories to
    - Imports
    - Movement to produce abroad

## Cons of Trade

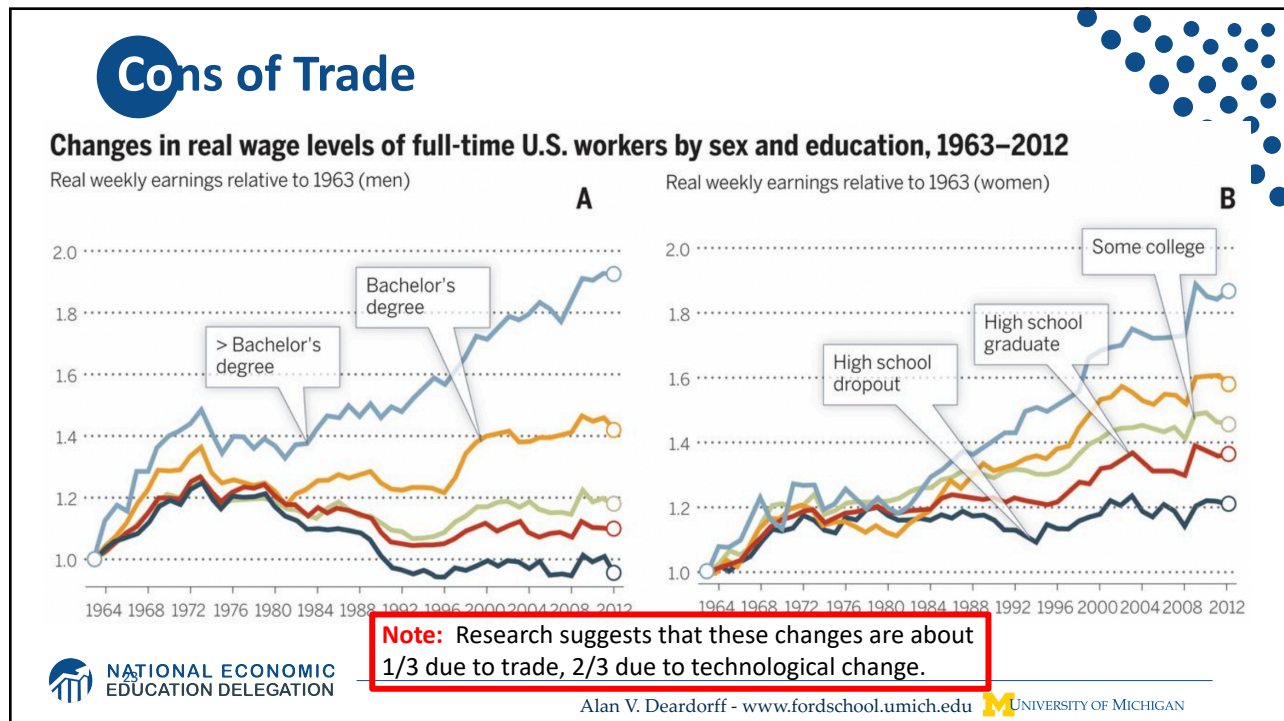
- **Dependence on foreign supply and demand**
  - Trade can be disrupted by
    - Natural disasters (earthquakes, floods, etc.)
    - Policies (export and import bans or taxes)
  - International cartels (oil crises of the 1970s)
- **Vulnerable to others' economies, diseases**
  - Recession in export markets causes recession at home
  - Exchange rate changes can cause inflation, unemployment
  - Infectious diseases spread through trade

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## Cons of Trade

- **Income distribution**
  - In rich countries like the US, aside from effects on their particular employers and industries
    - Low-wage workers lose to competition with lower wages abroad.
    - High-wage workers gain.
  - Owners of capital gain generally, because capital is mobile and labor is not.
  - (These effects could be dampened or reversed by policy, but mostly they are not, as the winners dominate policy.)

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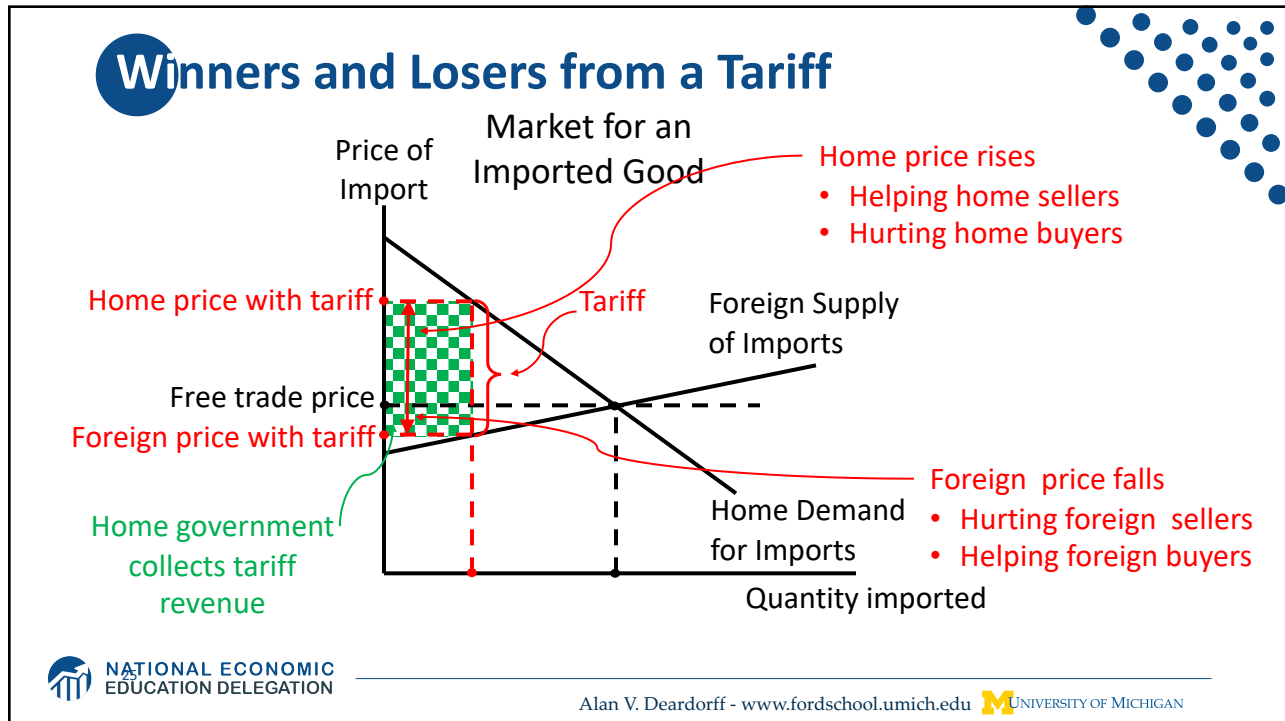
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## Winners and Losers from Tariffs

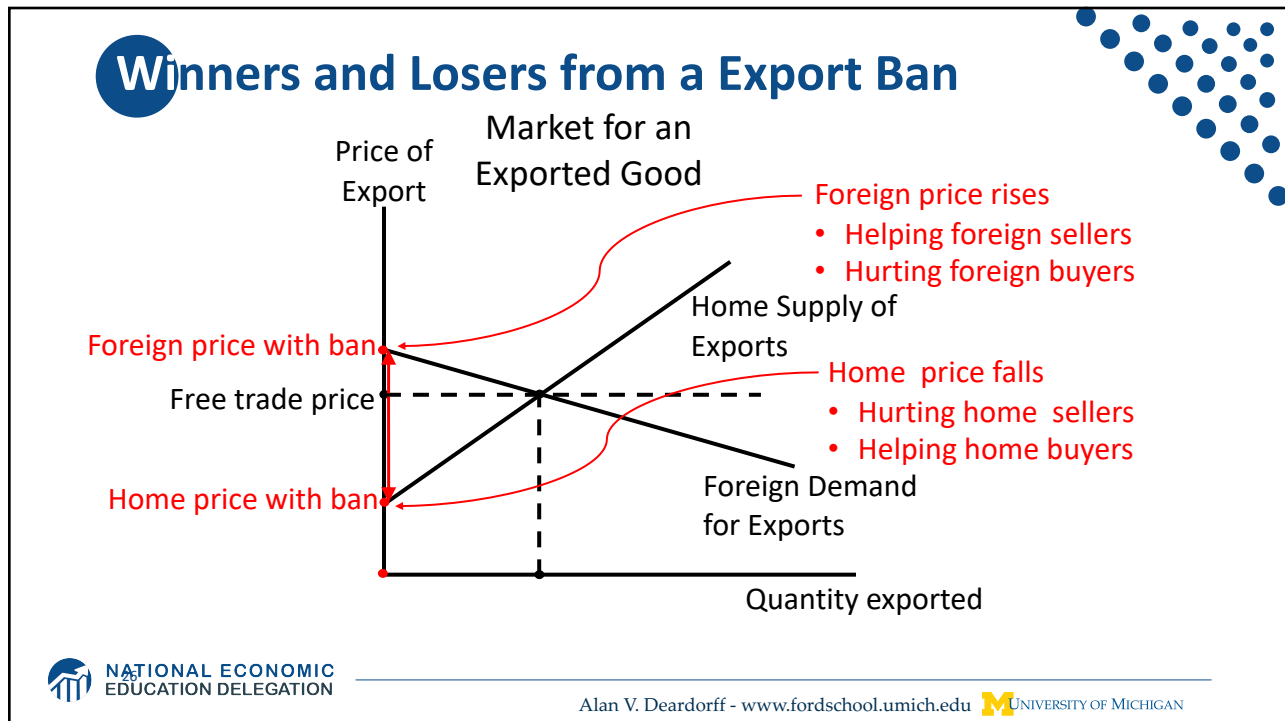
- At the “micro” level of an import tariff on a product
  - Price in the importing country rises
  - Price in the exporting countries falls
  - In the importing country
    - Competing sellers gain
    - Buyers lose
    - Government collects revenues
  - In the exporting counties
    - Sellers lose
    - Buyers gain

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# The Pandemic and Trade

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## Causes of the Pandemic

- **Does trade cause new infections?**
  - No. These arise from mutations, often in animals and then spread to humans
- **Does trade spread infections?**
  - Yes. Trade requires movement of people across borders, carrying infections
  - The Black Death (bubonic plague)
    - “is believed to have been spread by both land and sea, originating in China and following the trade routes to Europe and the Middle East.”
  - The 1918 Spanish Flu: but spread more by soldiers than by trade

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# Causes of the Pandemic

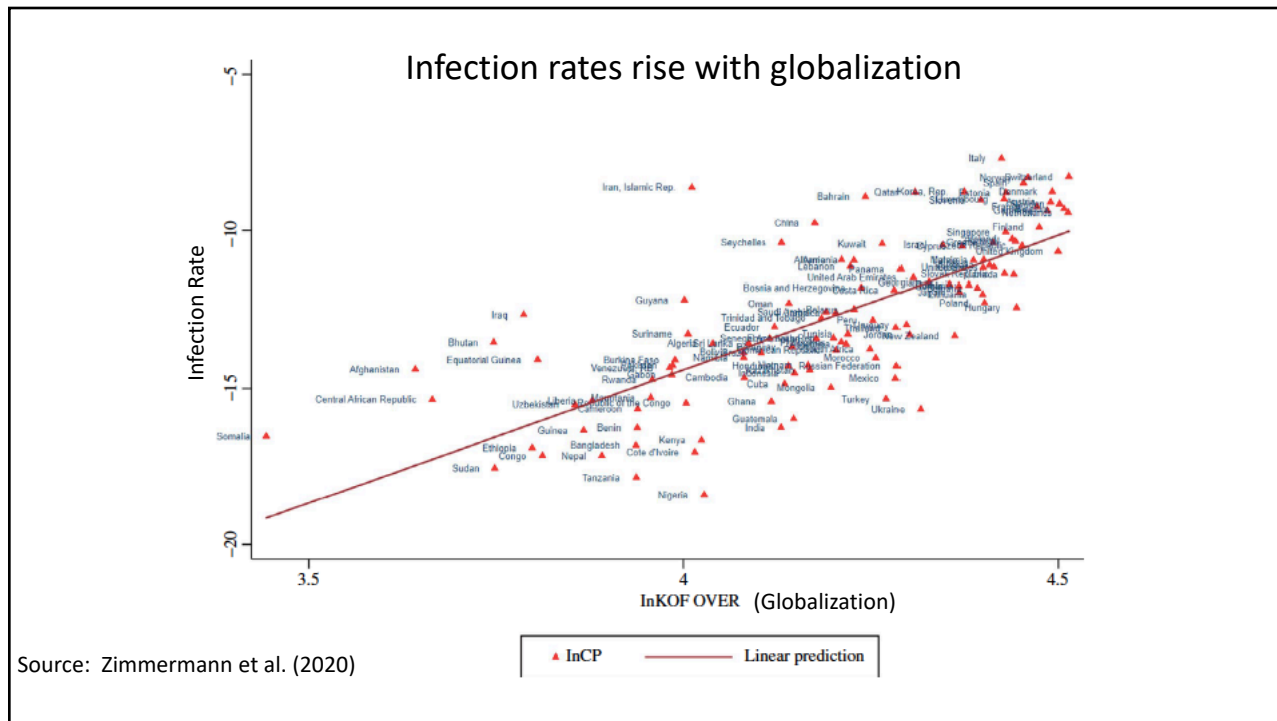
## • Studies Relate Globalization and Spread of Pandemic

- Zimmermann et al. find, across countries:
  - o Infection rate rises with globalization
  - o Transmission speed rises with globalization
  - o Fatalities fall with globalization
    - (but probably because globalization is correlated with higher incomes and thus better treatment)
- Farzanegan et al. report similarly

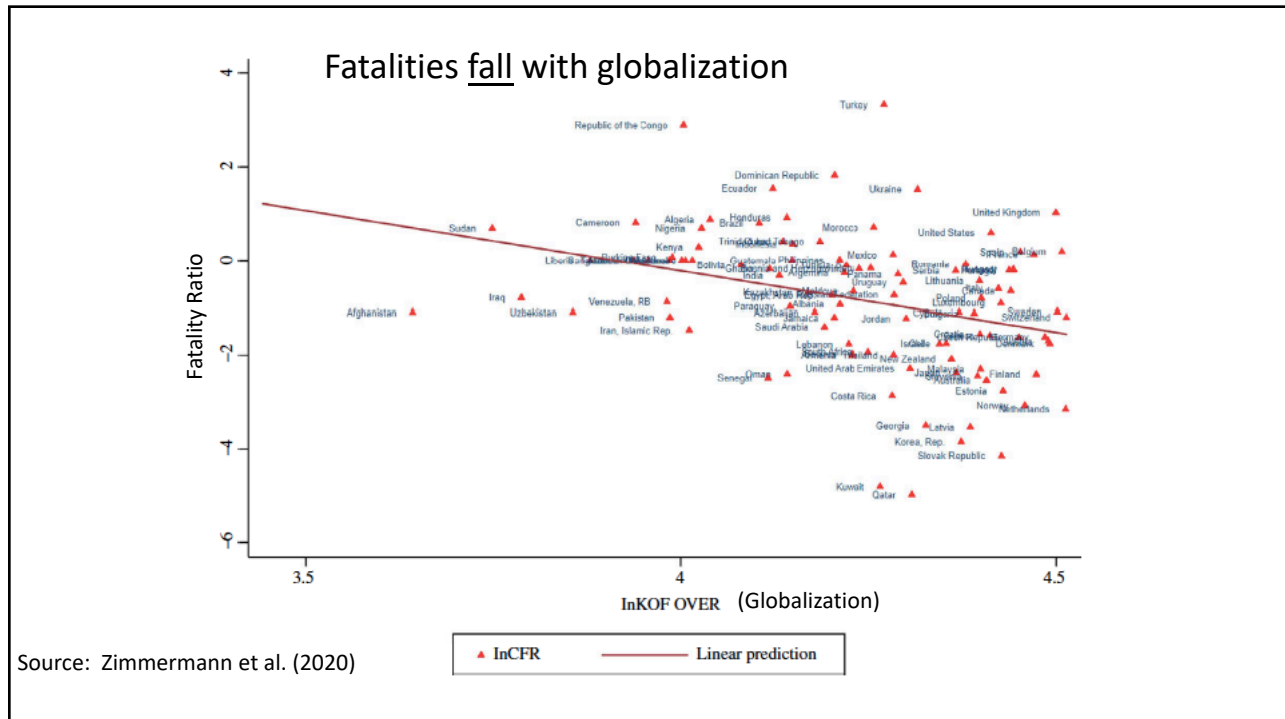


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## Causes of the Pandemic

- **Globalization and Spread of Pandemic**
  - Note that globalization is not just trade
  - It includes
    - International trade and investment
    - International tourism
    - International students
    - Migration
    - International transportation

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# How Trade Mattered

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## How Trade Mattered

- China gained
- Tourist destinations lost
- Transport industry disrupted
- Industries and consumers suffered shortages

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# How Trade Mattered

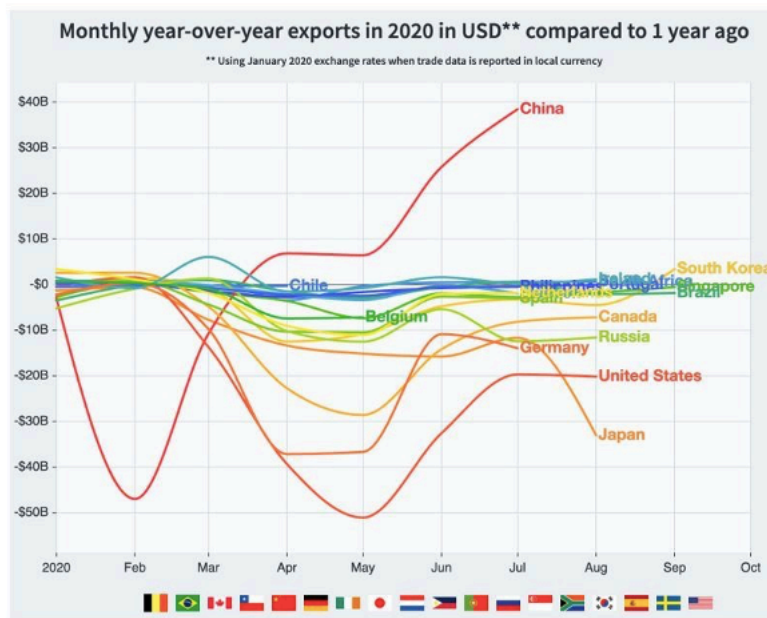
## • China gained

- After first being hurt by its own shut-downs
- China's exports rose to new heights
- China was, and is, main supplier of PPE



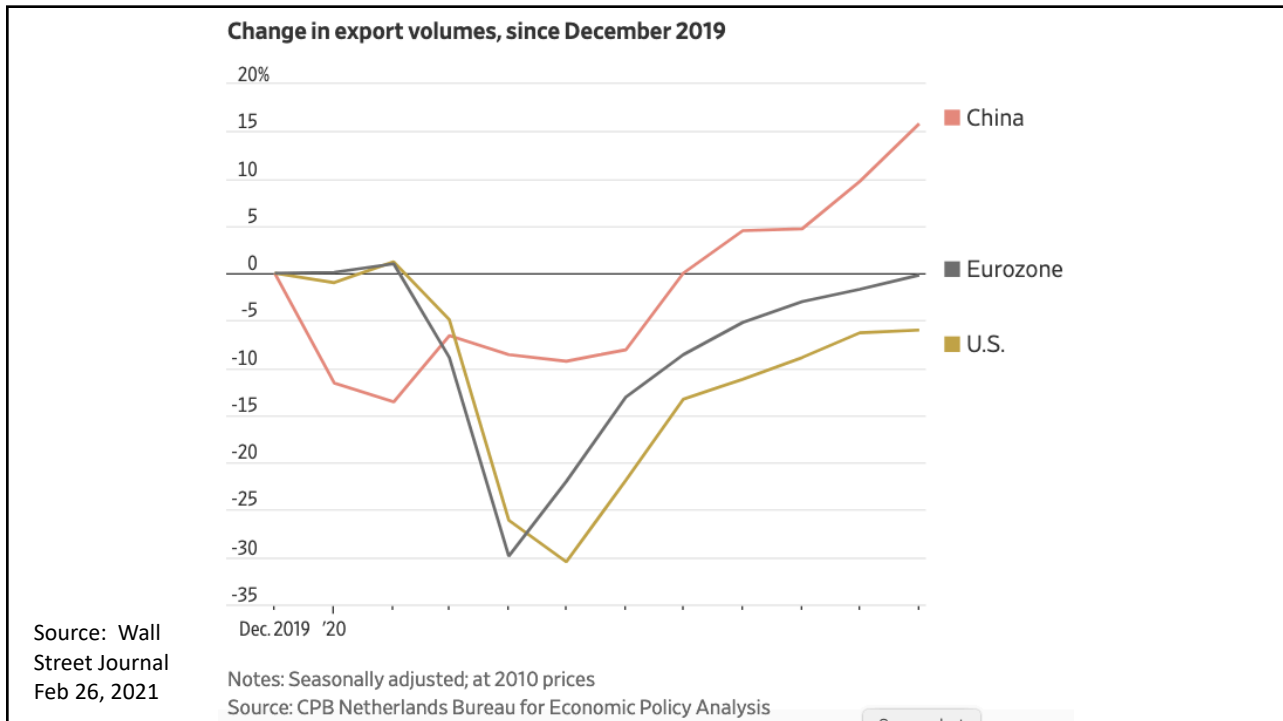
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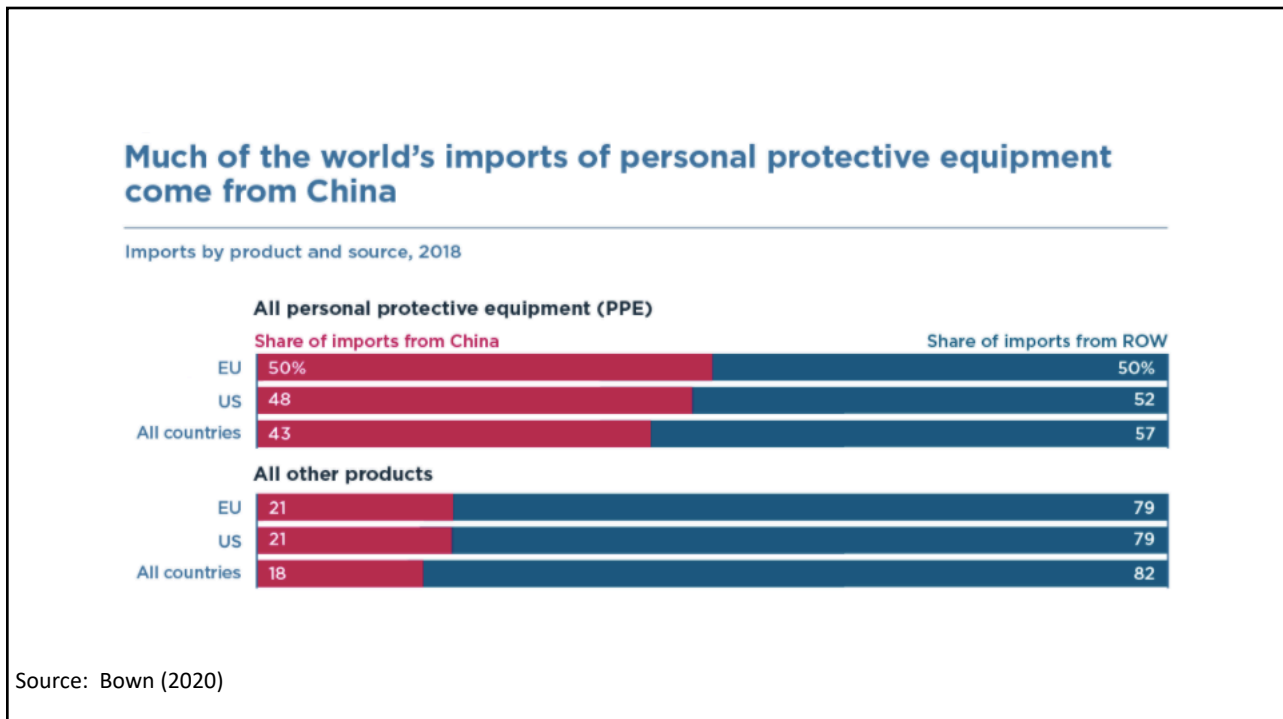


Source:  
World  
Economic  
Forum  
Nov 8, 2020

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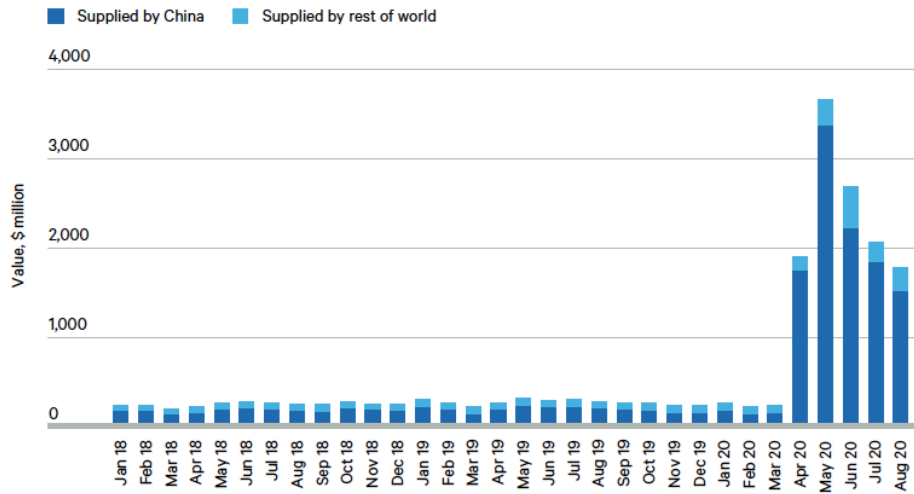


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**Figure 2.** Value of face mask imports into the US in 2018–20, by source, \$ million



Source: Evenett (2021)

Source: United States International Trade Commission (undated), USITC DataWeb, <https://dataweb.usitc.gov> (accessed 25 Jan. 2021).

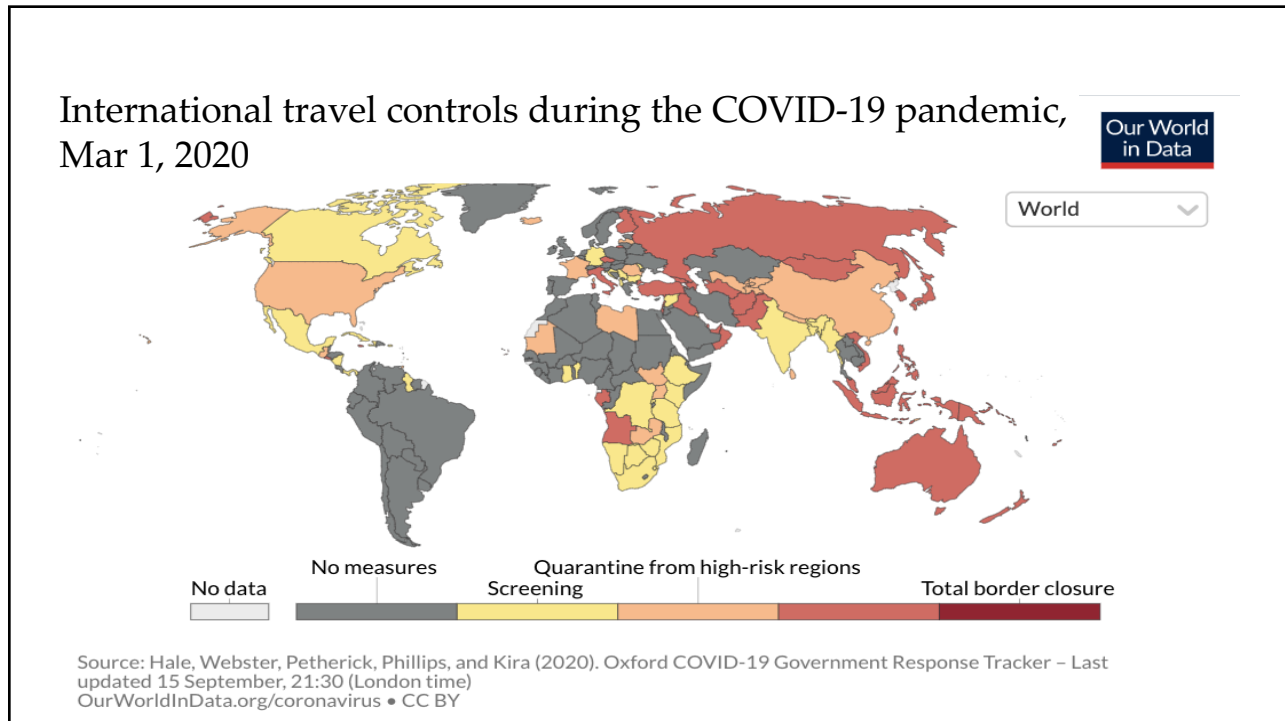
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## How Trade Mattered

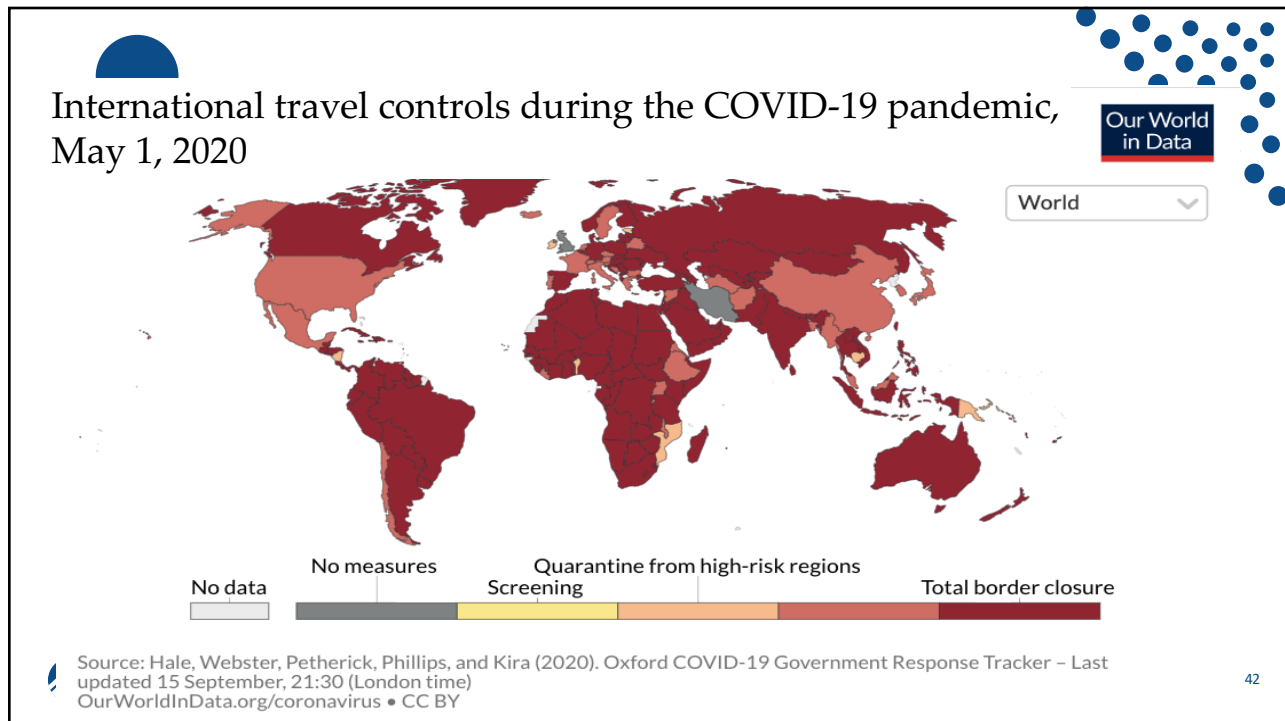
- **Tourist destinations suffered**

- True across the world
- Countries differ in reliance on tourism
  - Small countries are most dependent
  - But important parts of large countries suffer too

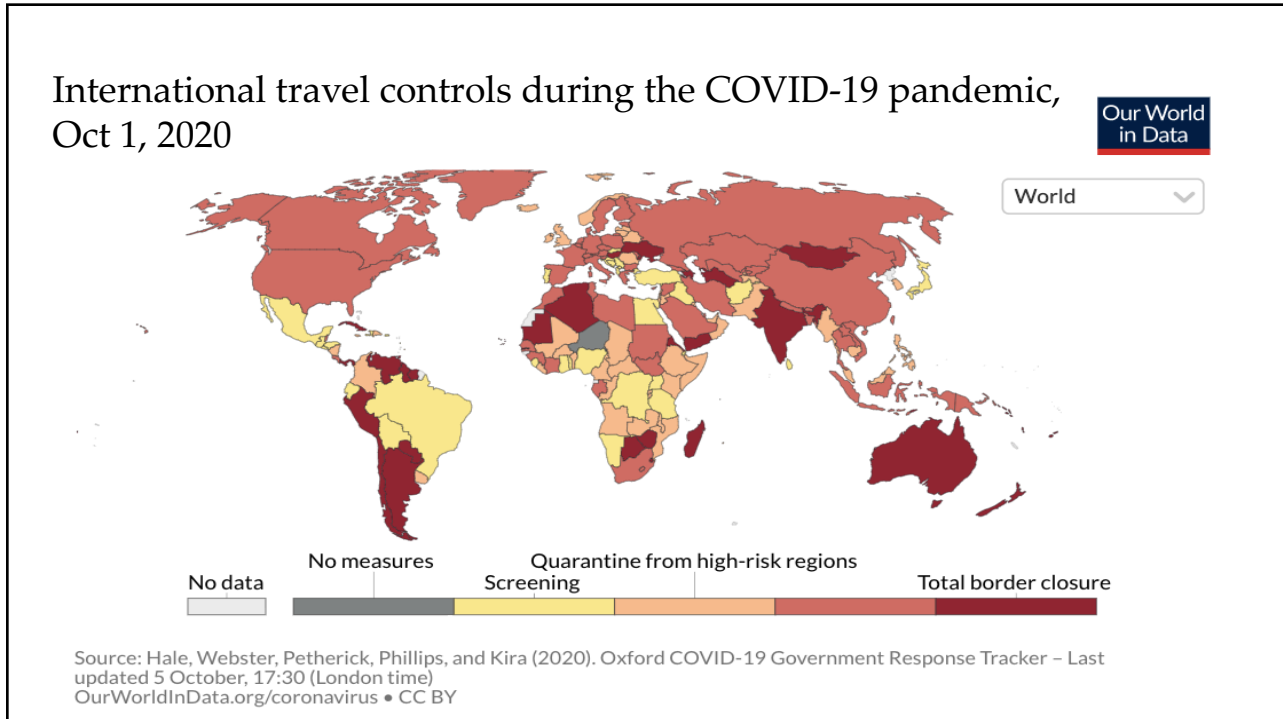
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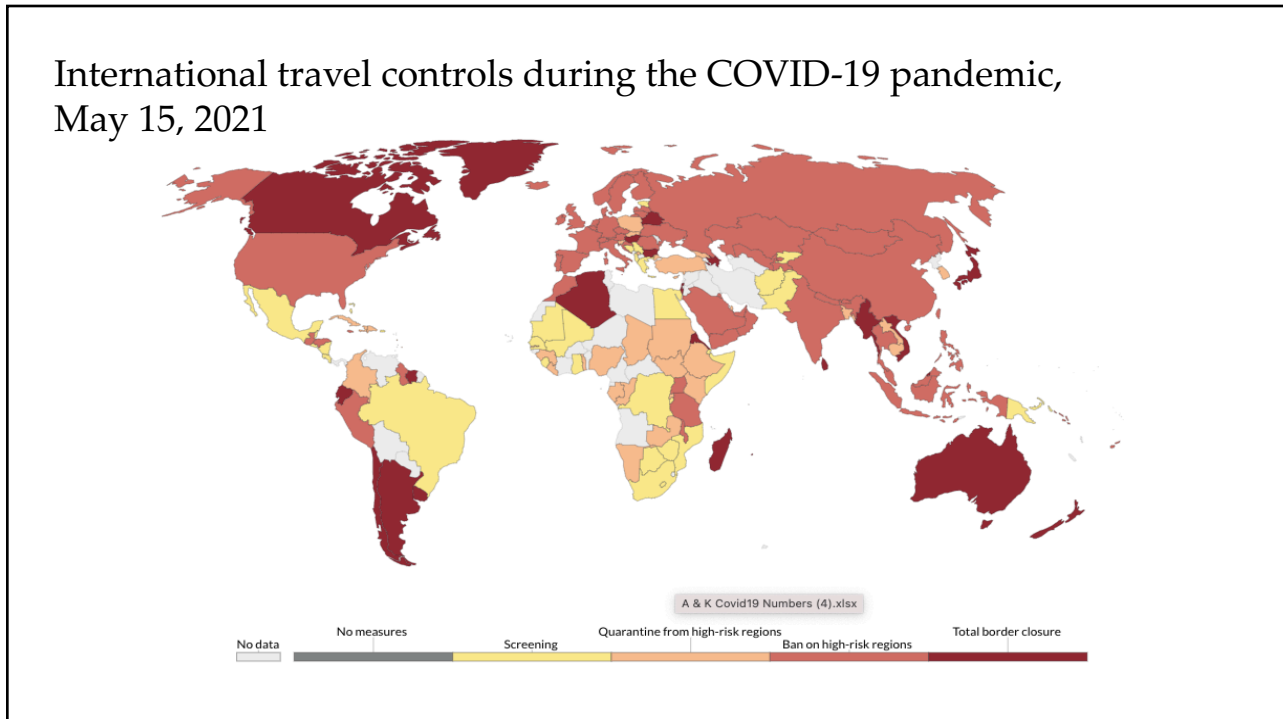
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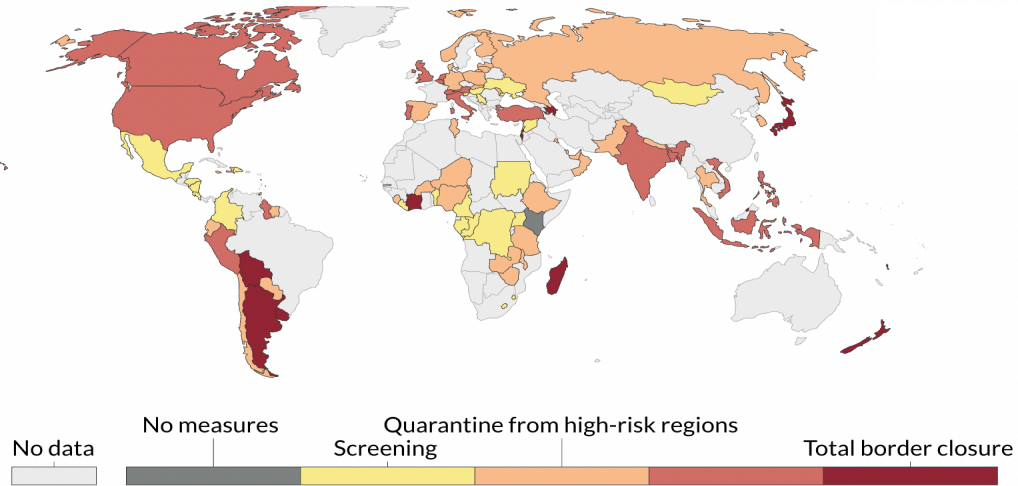


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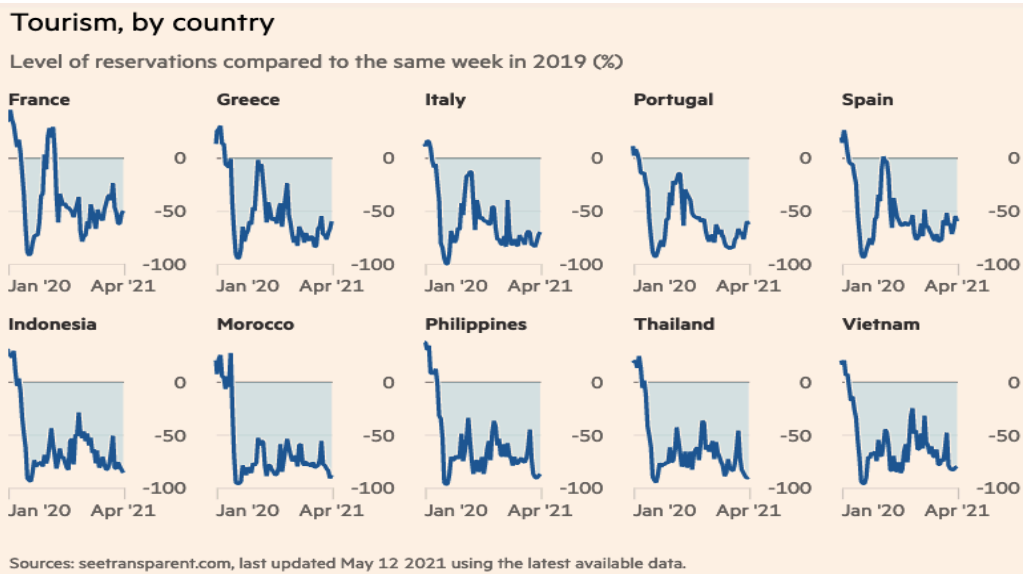


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### International travel controls during the COVID-19 pandemic, Sep 10, 2021



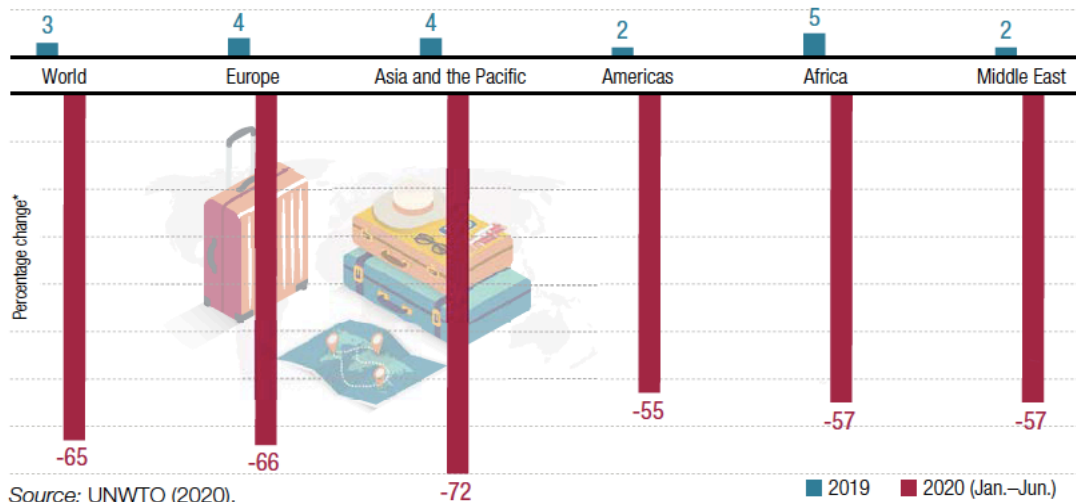
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Source: FT  
5/14/21

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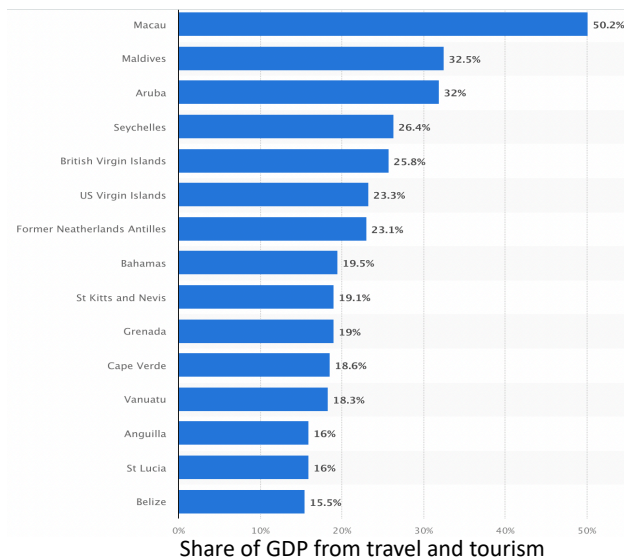
**Figure 5.2**  
**International tourist arrivals, January 2019–June 2020**



Source: UNWTO (2020).  
 UNCTAD \* Change over the same period of the previous year.

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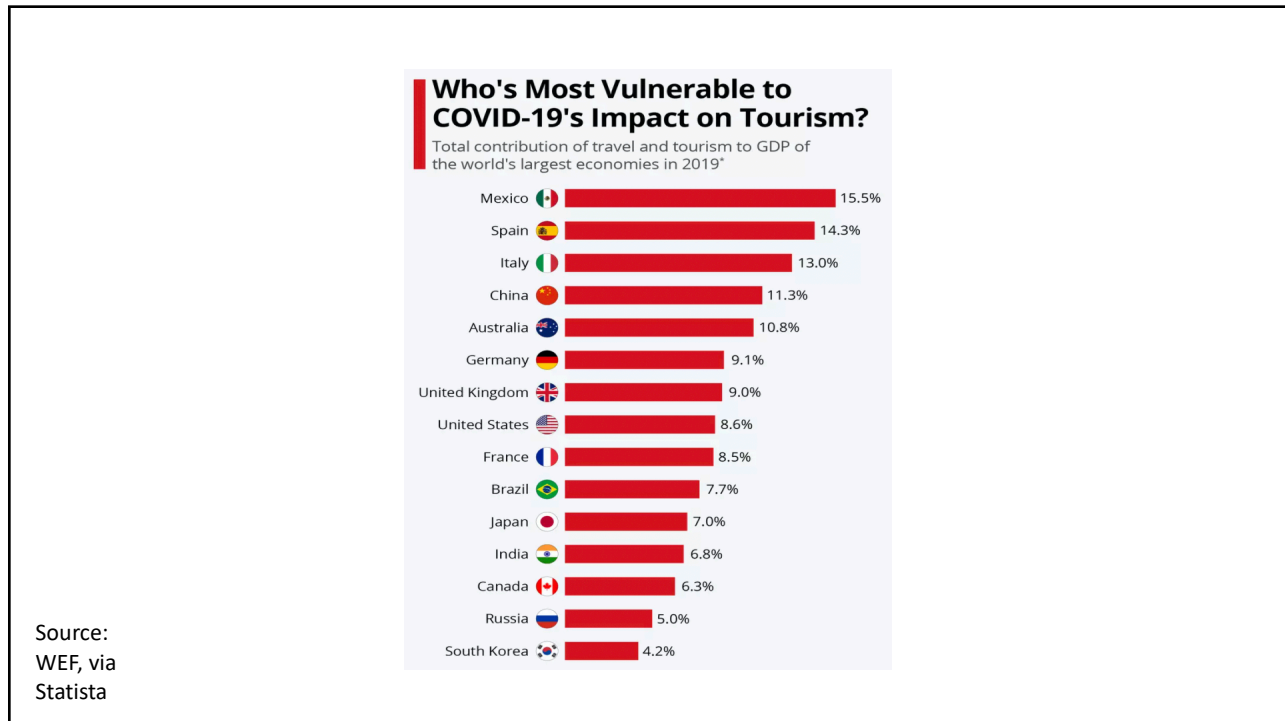
**Countries with the highest share of GDP generated by direct travel and tourism worldwide in 2019**



Source: Statista

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## How Trade Mattered

- **Transport industry disrupted**
  - Initial fall in trade reduced demand
  - Crews on ships were trapped aboard
  - Trade recovery has brought much of transport back
  - Costs and prices have risen

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# How Trade Mattered

## • Shipping by Sea

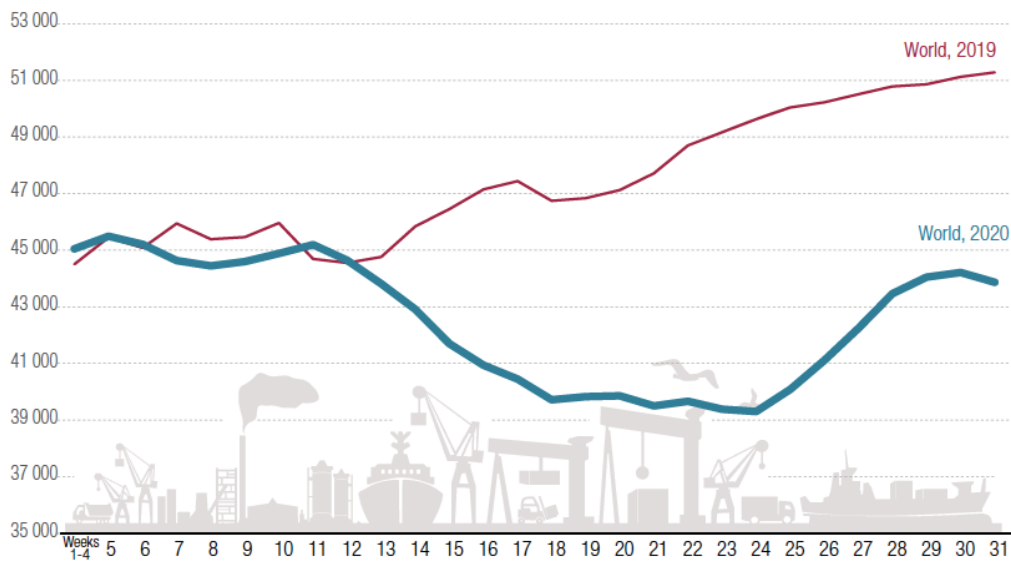
- Drop in trade reduced demand at first
  - Then increased demand for restocking
- Pandemic added restrictions
  - At ports
  - For crews
- Shipping rates rose



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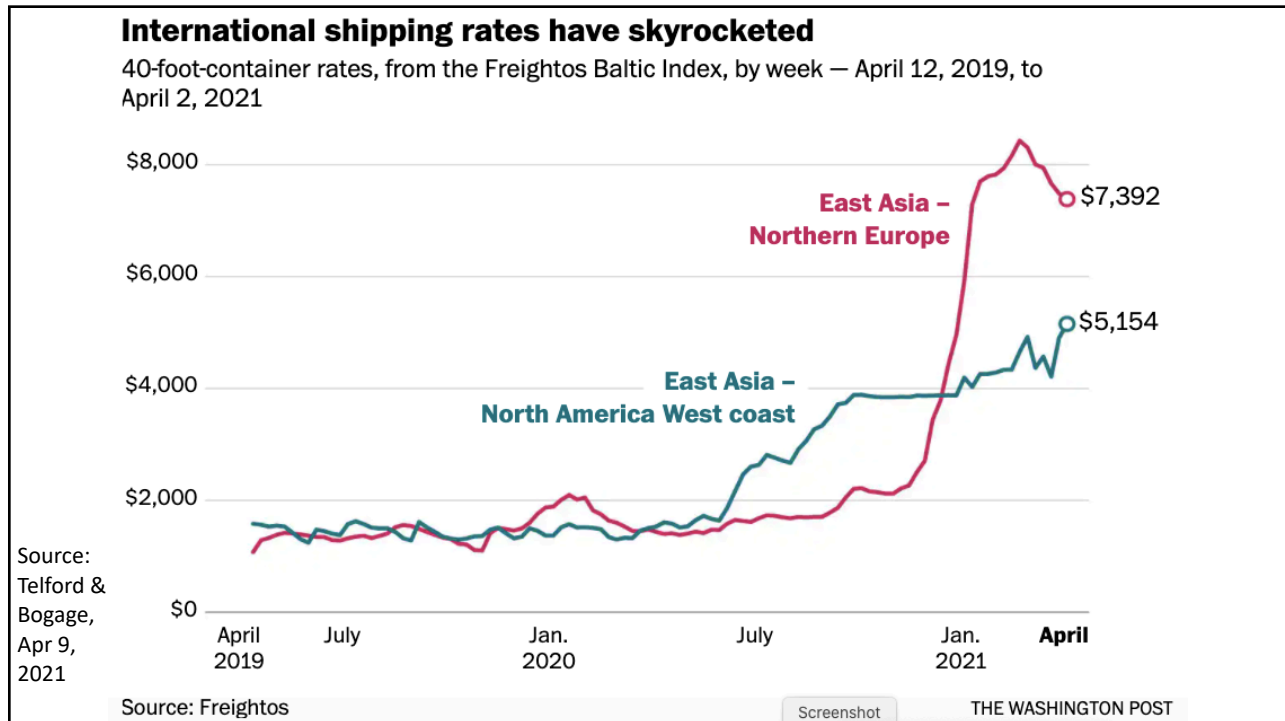
**Figure 1.7**  
World total: Weekly ship port calls, all ships\*



Source: UNCTAD

Source: UNCTAD calculations based on data provided by Marine Traffic.  
\* Four-week moving weekly average.

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## How Trade Mattered

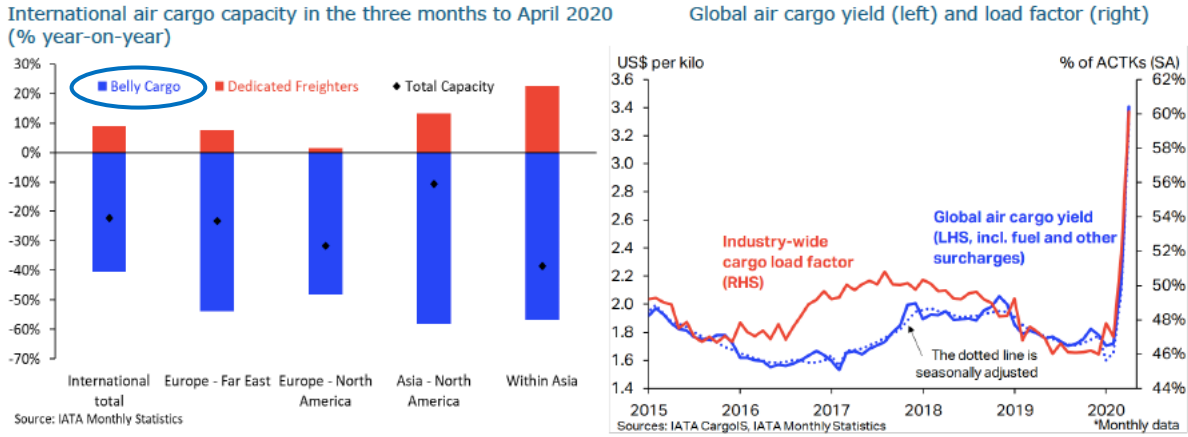
- **Shipping by Air**
  - This too was hurt, as fewer passenger flights also carried less cargo

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**Figure 6: Global air cargo capacity plummeted, causing a surge in air cargo yields**



© International Air Transport Association, 2020. [Cargo Chartbook - Q2 2020](#). All Rights Reserved.

Source: WTO (2020)

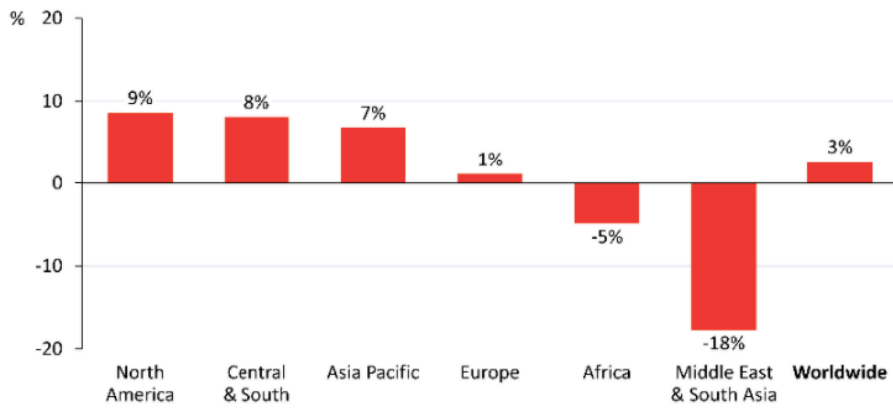
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## Air cargo volumes back to normal

Year-on-2-Year

Year-on-Year change of chargeable weight Per origin region (Apr 2021 vs. Apr 2019)

WorldACD MARKET DATA

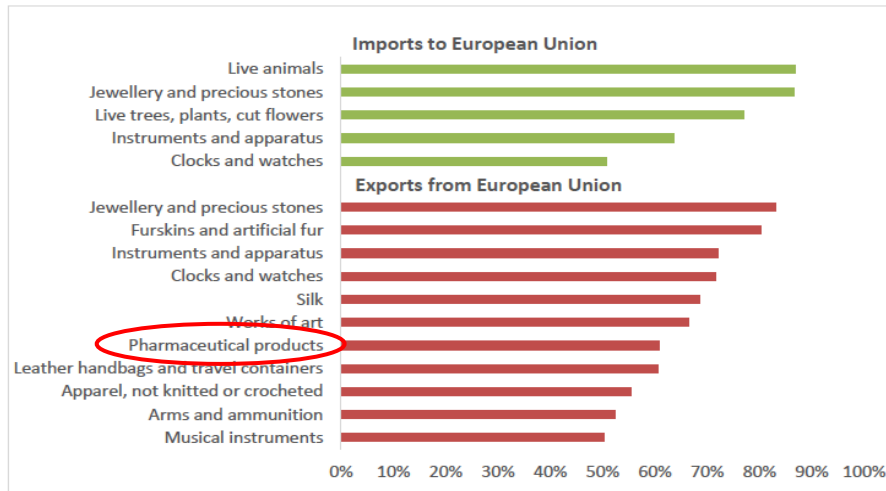


Source: AJOT May 17, 2021

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**Figure 7: Product categories where air is the dominant transport mode**

HS 2-digit product categories where more than 50 per cent of EU external trade value was transported by air in 2019



Source: WTO (2020)

Source: WTO Secretariat's calculations based on Eurostat, "EXTRA EU Trade Since 2000 By Mode of Transport (HS6)" (DS-043328). Consulted on May 18, 2020.

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## How Trade Mattered

### • Shortages

- First from reduced China exports
- Then other shut-downs, worldwide
- Factories lack inputs and can't produce
  - o Computer chips especially
- Prices rise, but buyers still must do without
- Economic models may miss this:

*Supply ≠ Demand*

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## How Trade Mattered

### • Shortages in the News

- NYT, Aug 30, 2021:

***The World Is Still Short of Everything. Get Used to It.***

## How Trade Mattered

### • Shortages in the News

- Today Show, Sep 14: “**Paper** shortages are impacting schools, grocery stores and more”
- Reuters, Sep 13: “From **zippers** to **glass**, shortages of basic goods hobble U.S. economy
- Detroit Free Press: “**Toy** makers: There's going to be a major shortage this holiday season”
- FT, Aug 23: “Executives warn of growing **container ship** shortages”
- WSJ, Aug 20: “Toyota to Cut Output as **Chip** Shortage Finally Catches Up to It”
- FT, Dec 9, 2020: “Honda closes UK plant as logjam at ports causes parts shortage”
- FT, Oct 31, 2020: “**Container** shortage exposes India’s struggle to recover from virus”
- WSJ, Mar 18, 2020: “Trump’s Tariffs Leave the U.S. Short on Vital **Medical Supplies**”

## How Trade Mattered

- **Who Loses from Shortages**

- Both buyers and sellers
- Hard to see anyone who gains. Sellers of competing products, perhaps, if they don't also have a shortage

## How Trade Policies Mattered

# How Trade Policies Mattered

- **There were many changes in trade policy prompted by the pandemic**

- Tariff reductions to improve access (PPE, medical supplies, etc.)
- Export restrictions to keep needed goods at home



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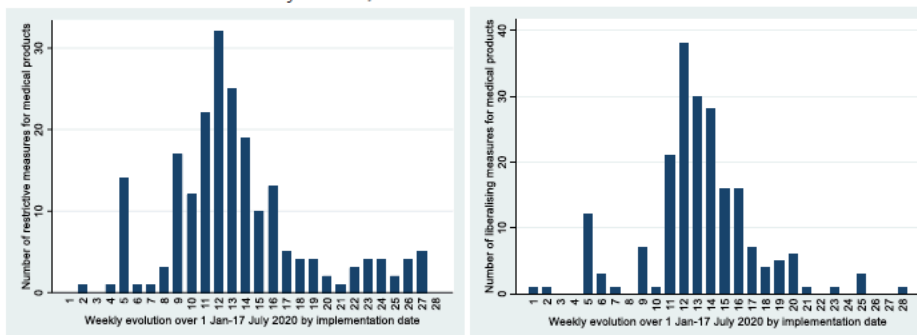
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**Figure 1: Trade measures for medical products (weekly, January-July 2020)**

*Export restrictions*

*Import liberalization*

Source: COVID-19 Trade Policy database, own calculations.

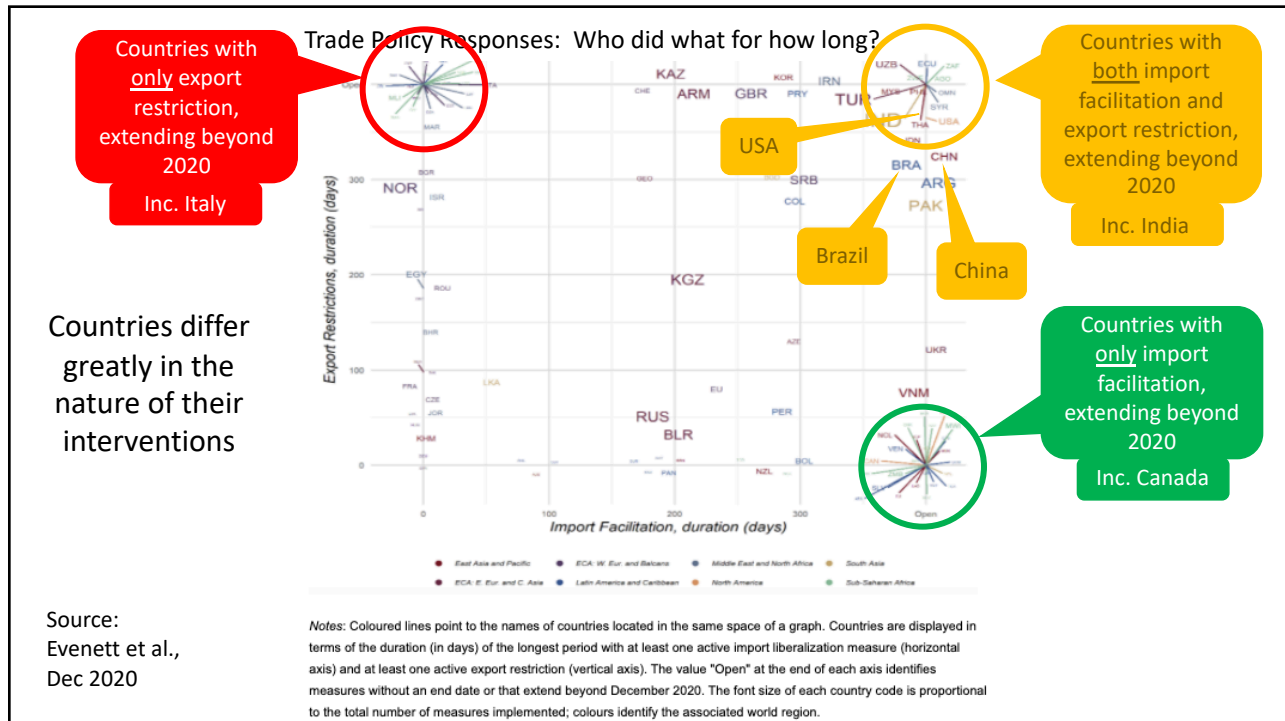


Note: The data at the end of each week do not consider the measures that were removed (with a removal date in that week).

Source: Hoekman et al. (2020)

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# Effects on Trade Policies

# Export Policies

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# Effects on Export Policies

## • Export Policies

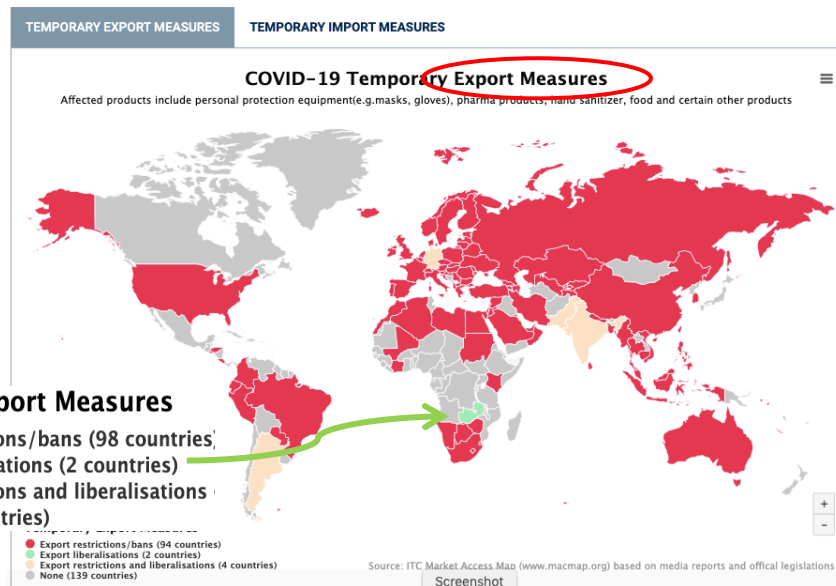
- There were export bans by many countries on
  - o Medical supplies
  - o Food
  - o Other
- Some were temporary, but many others were not
- Only a few countries had policies to encourage exports



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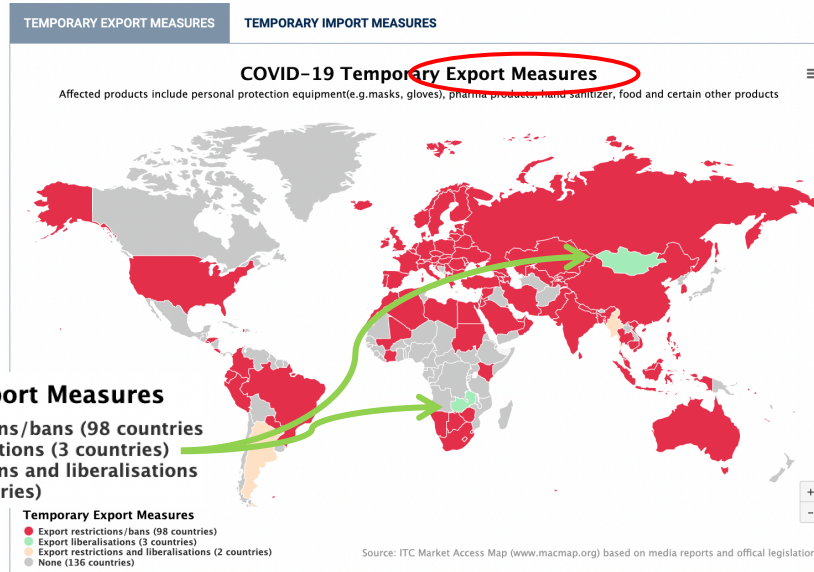
I. Global map of COVID-19 temporary trade measures (September 11, 2020)



Source: ITC

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I. Global map of COVID-19 temporary trade measures (September 13, 2021)

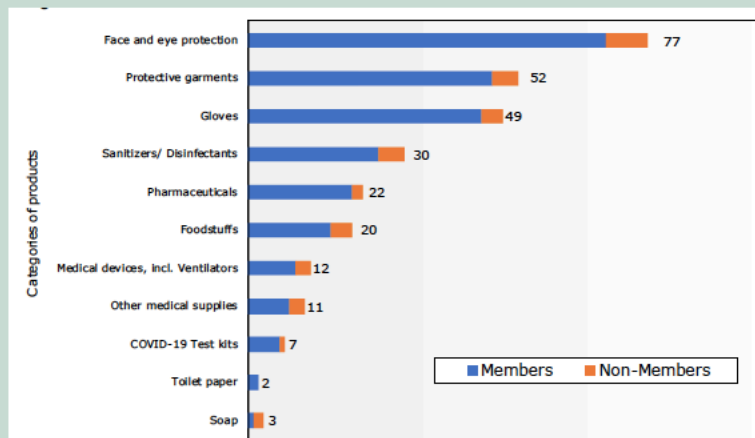


Source: ITC

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Figure 1 Export prohibitions and restrictions introduced to combat the COVID-19 pandemic, by type of product.

(Number)



Source: WTO (2020)

Source: WTO Secretariat based on data available in the Trade Monitoring Report.

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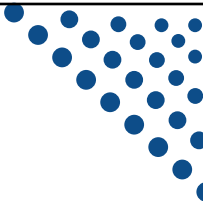
**Effects on Trade Policies**

# Import Policies

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**Effects on Import Policies**

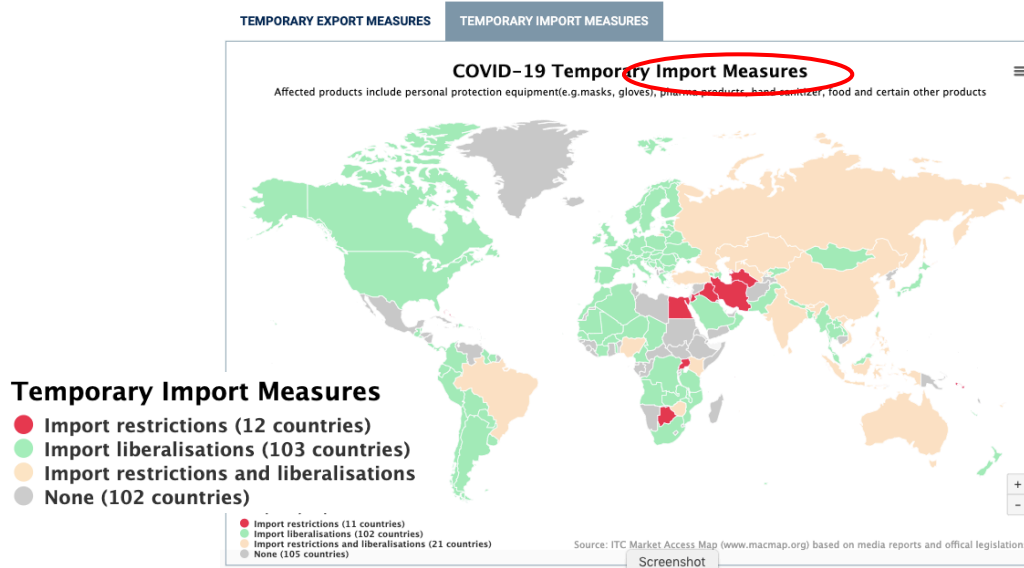
- **Effects of the Pandemic on Import Policies**
  - Import expansion
    - Tariff reductions
  - Import contraction
    - Tariff increases
    - Import bans
    - Government procurement

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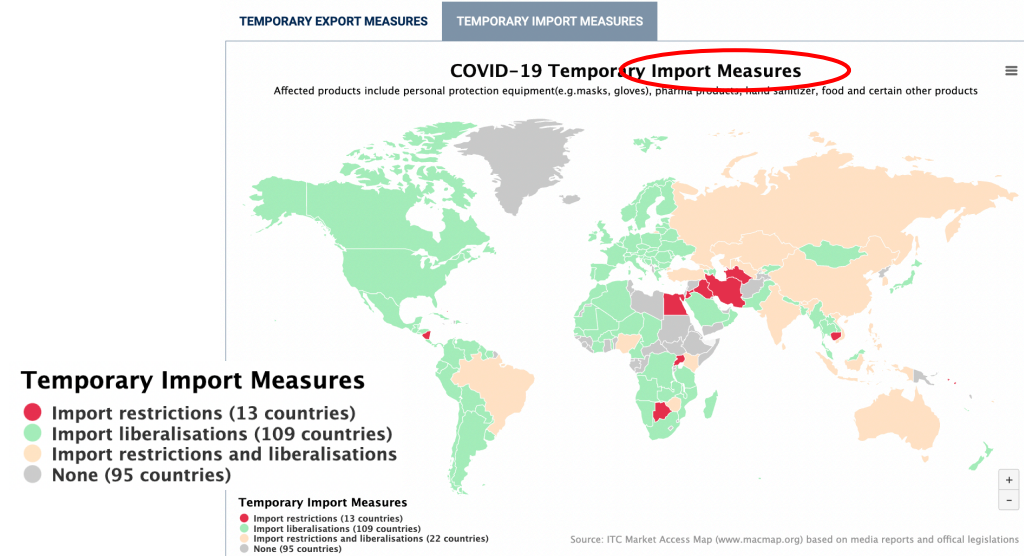
### I. Global map of COVID-19 temporary trade measures (September 11, 2020)



Source: ITC

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### I. Global map of COVID-19 temporary trade measures (September 13, 2021)



Source: ITC

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# Role of Trade During Pandemic

## • Vaccines

- Vaccine industry relies heavily on trade
- Trade concerns
  - o Distribution to the poorest countries
  - o Vaccine nationalism



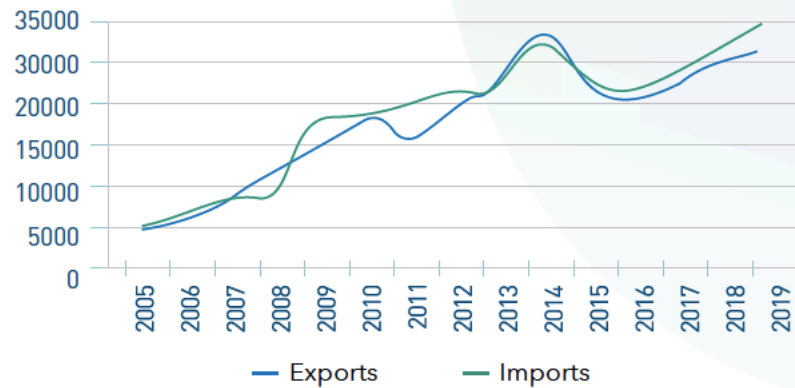
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## World trade of vaccines for human medicine (HS 300220), 2005-19

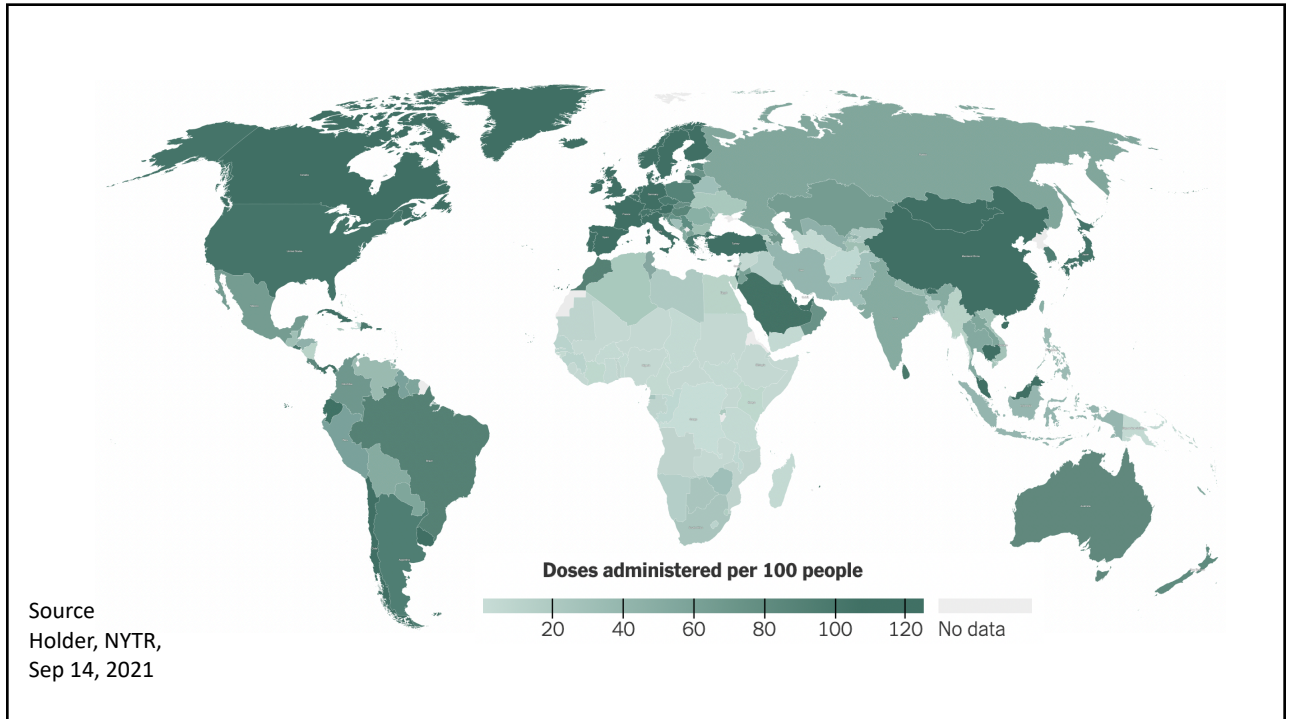
(Million dollars)

Source: [WTO Secretariat](#)

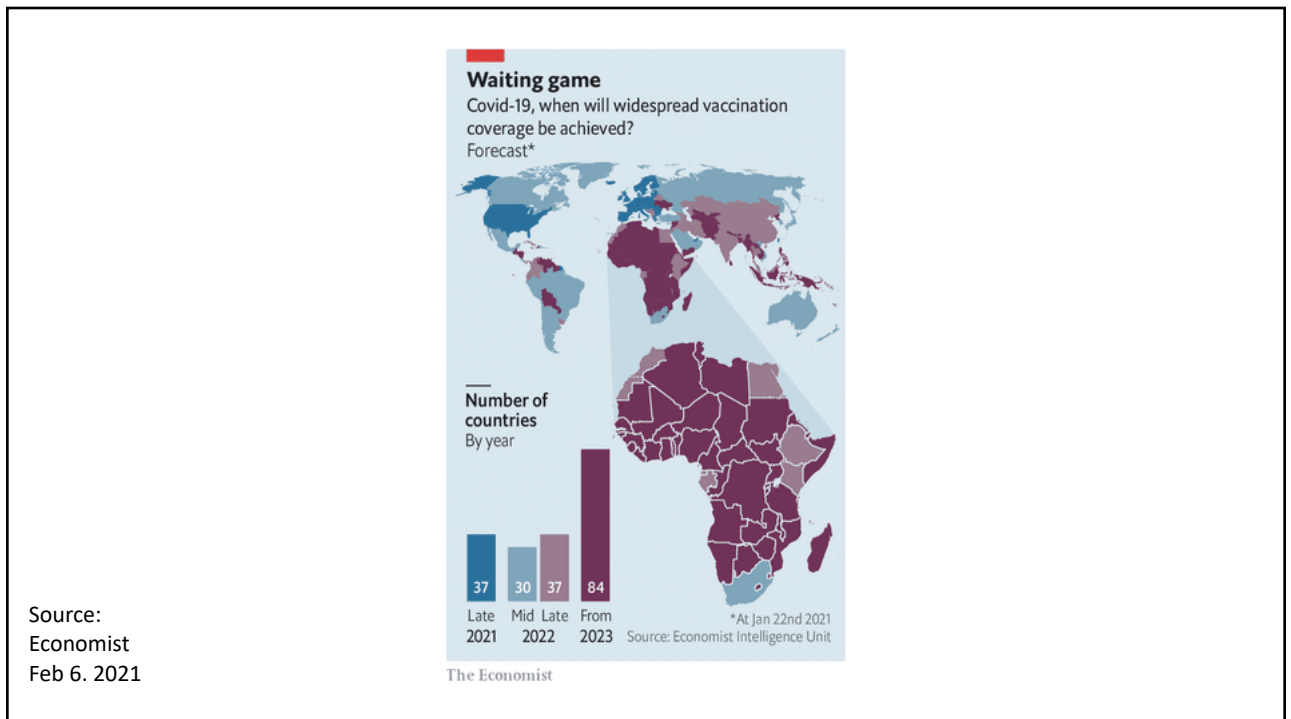


Source: WTO, Dec 22, 2020

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Source:  
Economist  
Feb 6. 2021

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# Vaccine Nationalism

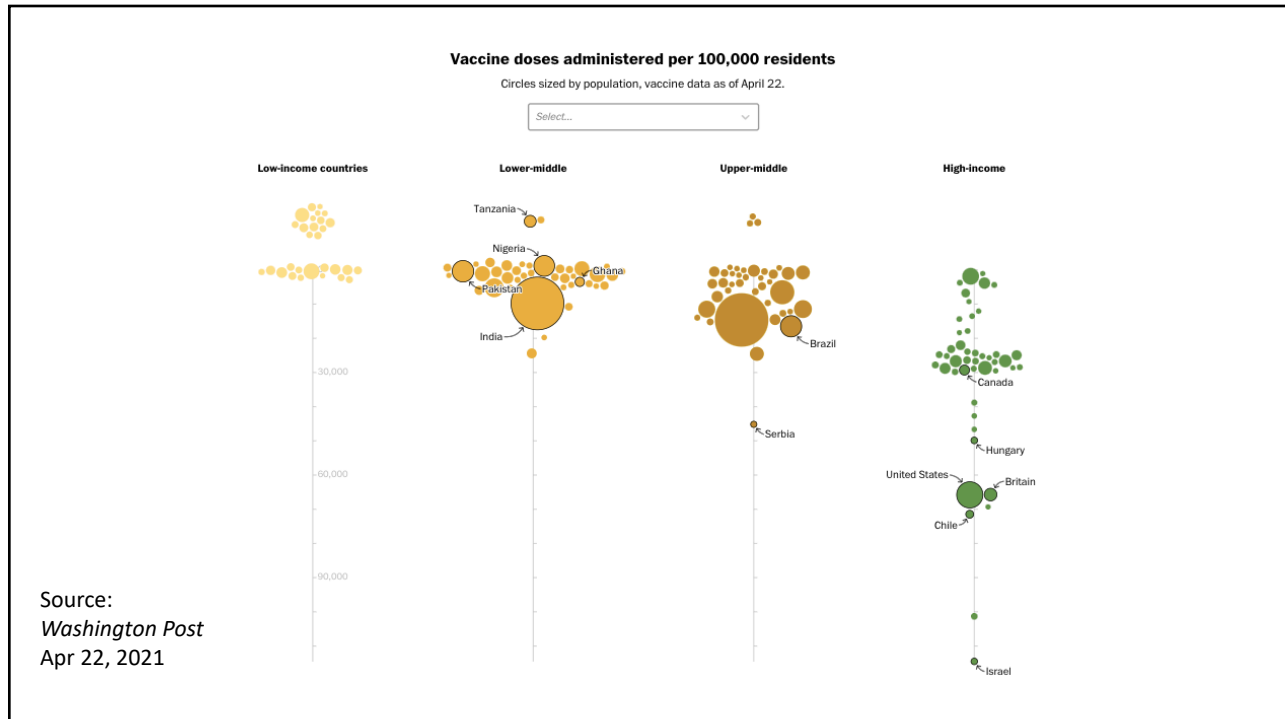
## • Vaccine Nationalism

- Some countries seek to restrict exports of vaccines until their own populations are served.
- On Jan 29, the EU announced export controls on COVID-19 vaccines
- US only in May announced it would export vaccines
- India exported many, but stopped when their cases surged
- I have had audience members hope that the US will not export vaccines until all Americans are vaccinated
- If this were done, it would slow the world's progress toward managing the pandemic



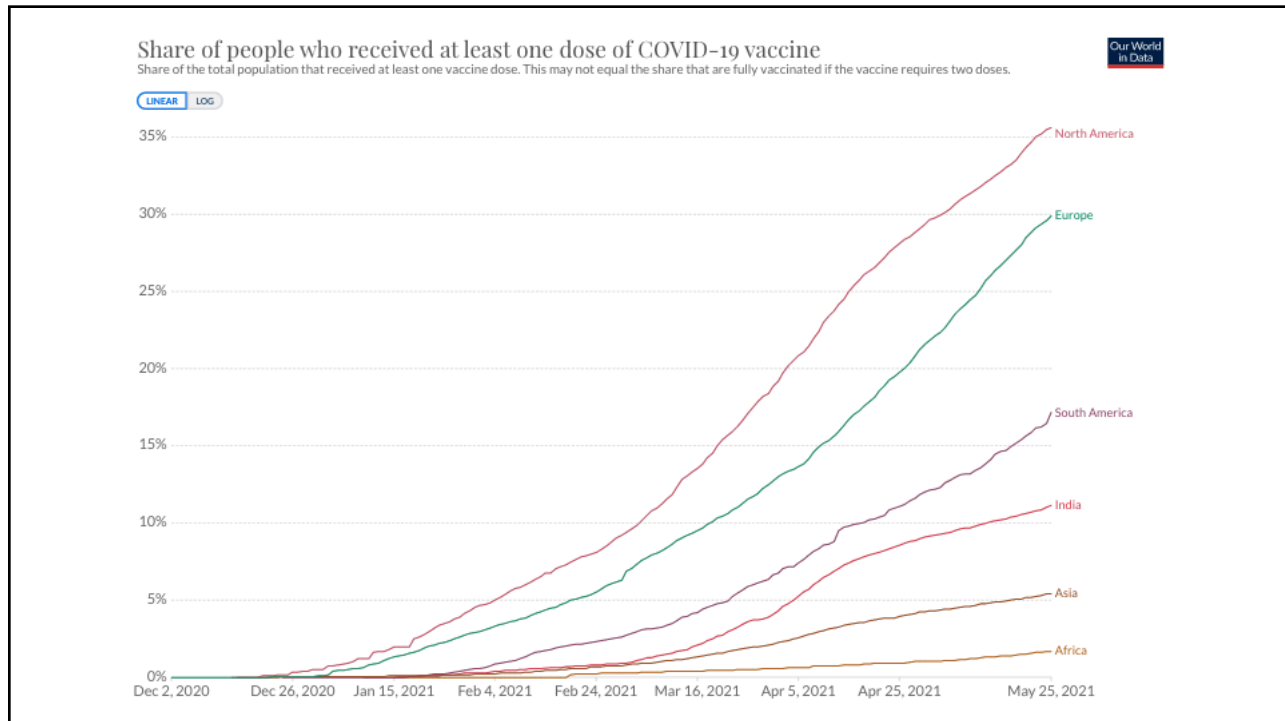
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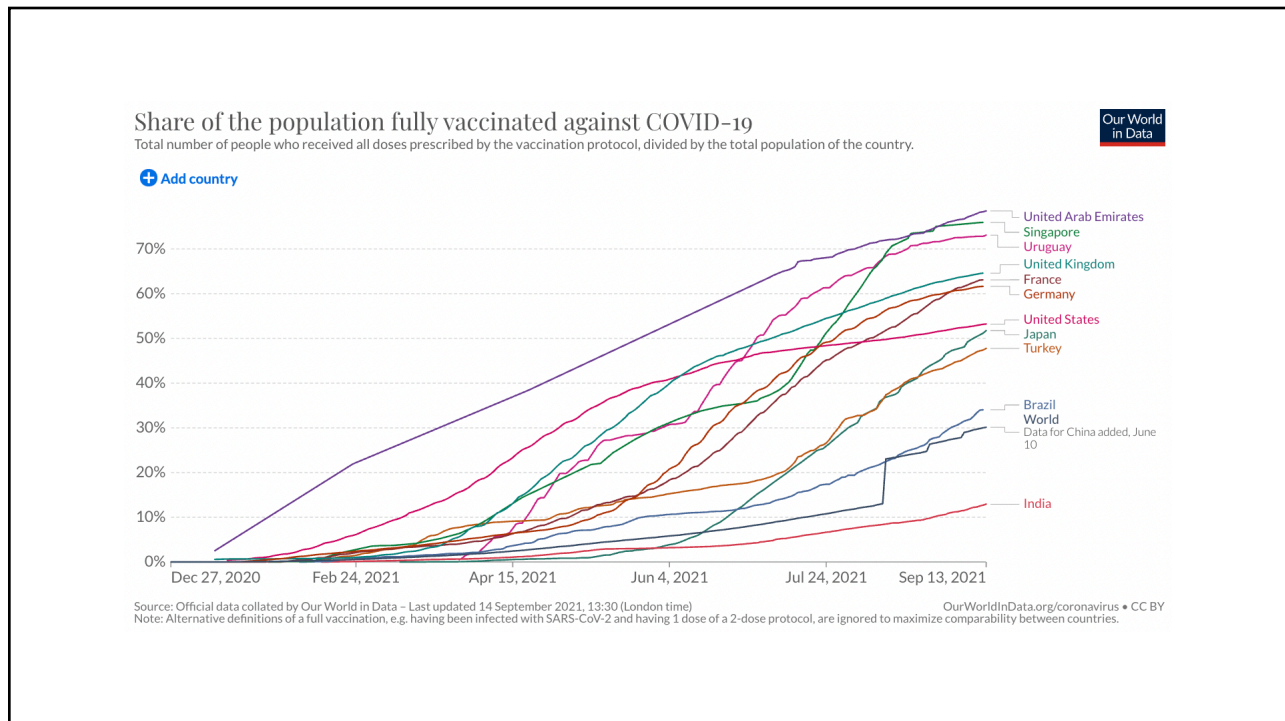


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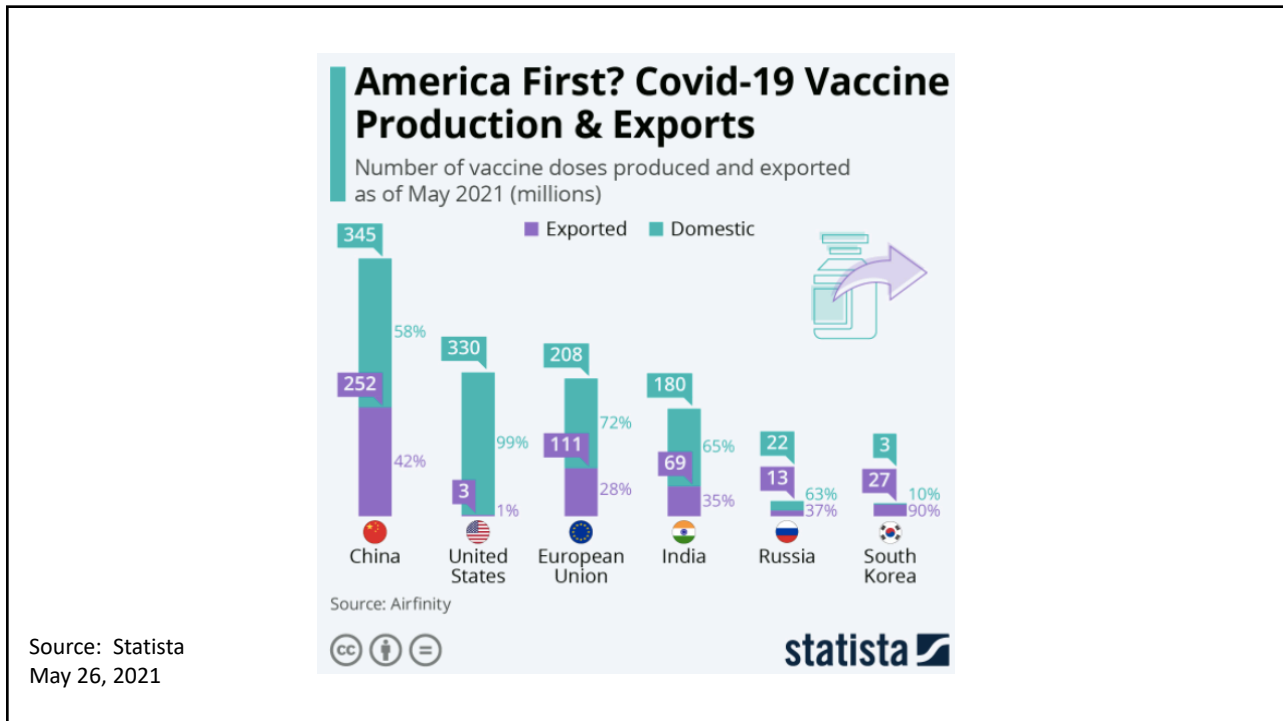




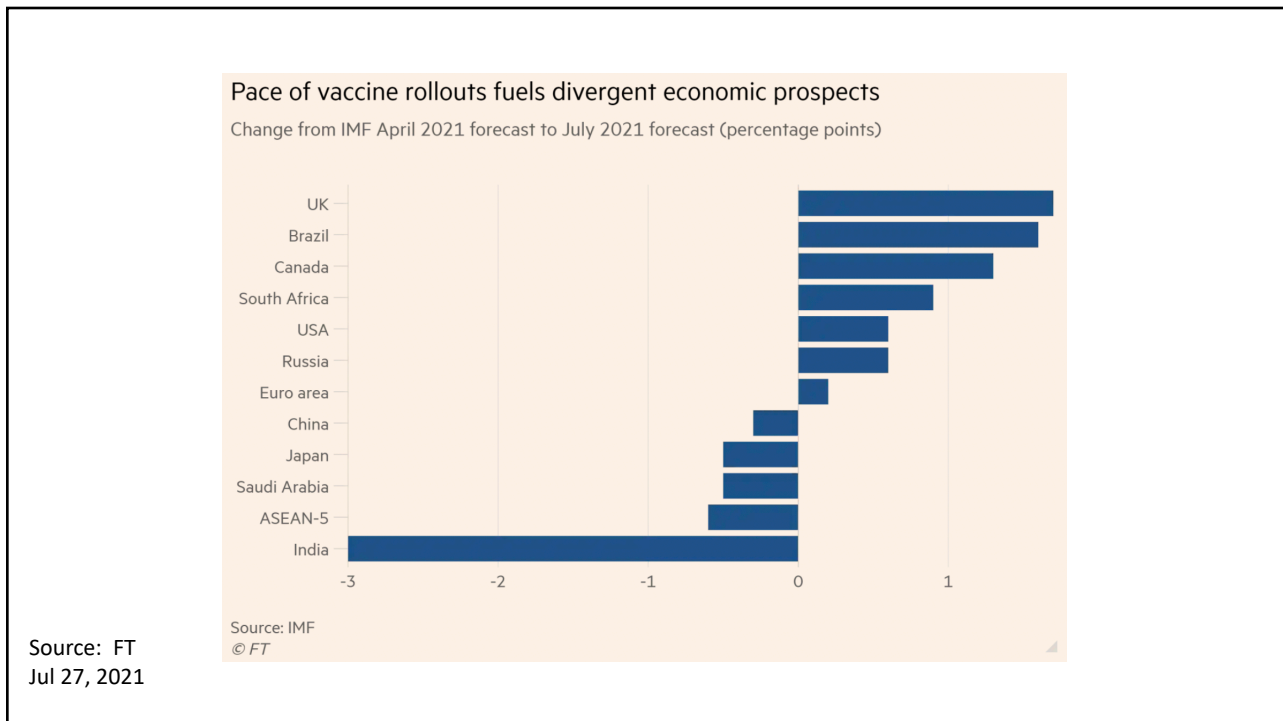
81



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# Vaccine Nationalism

- **COVAX**

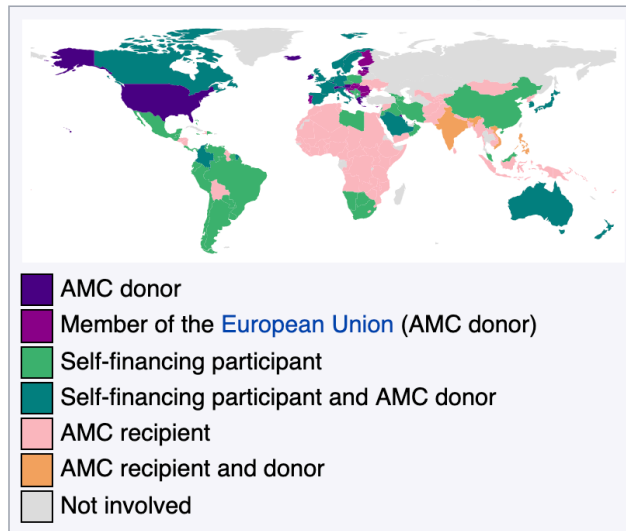
- An initiative launched the World Health Organization, the European Commission, and France to provide vaccines to people in all countries regardless of wealth
- May 17, 2021: “The COVAX Facility will deliver its 65 millionth vaccine dose this week. It should’ve been at least its 170 millionth. The time to donate excess doses is now.”



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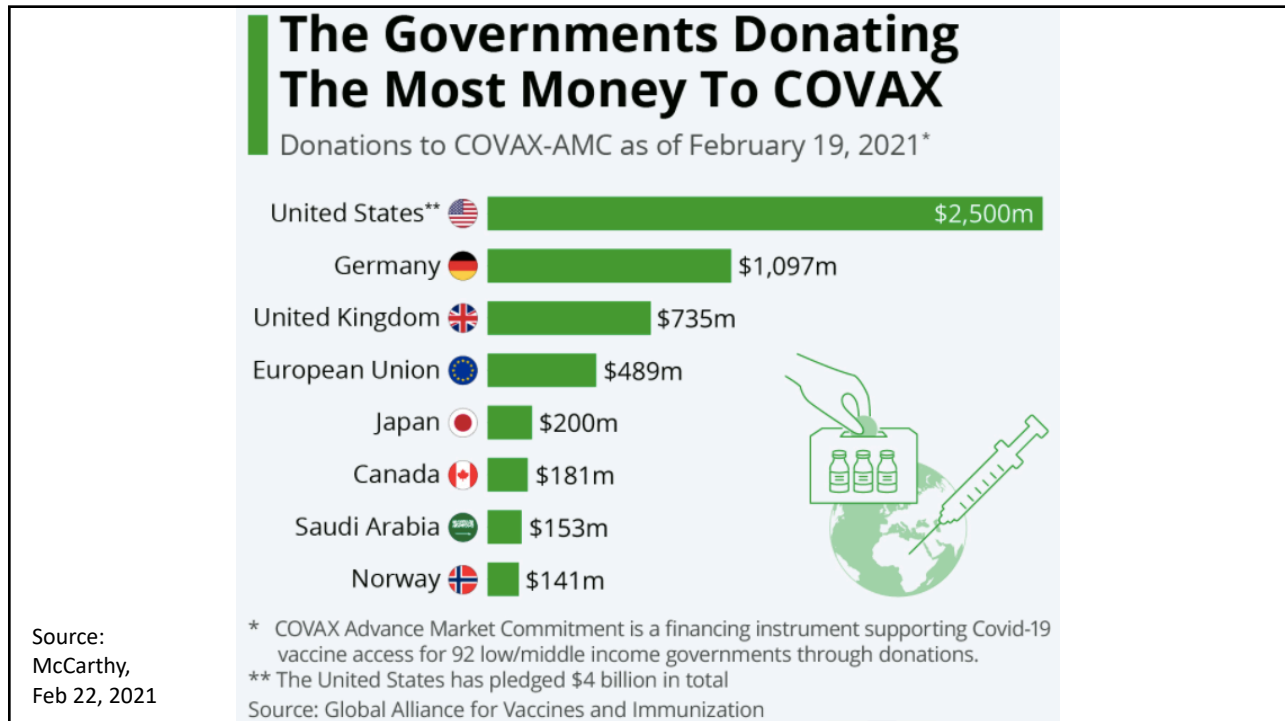
85

## Involvement by country

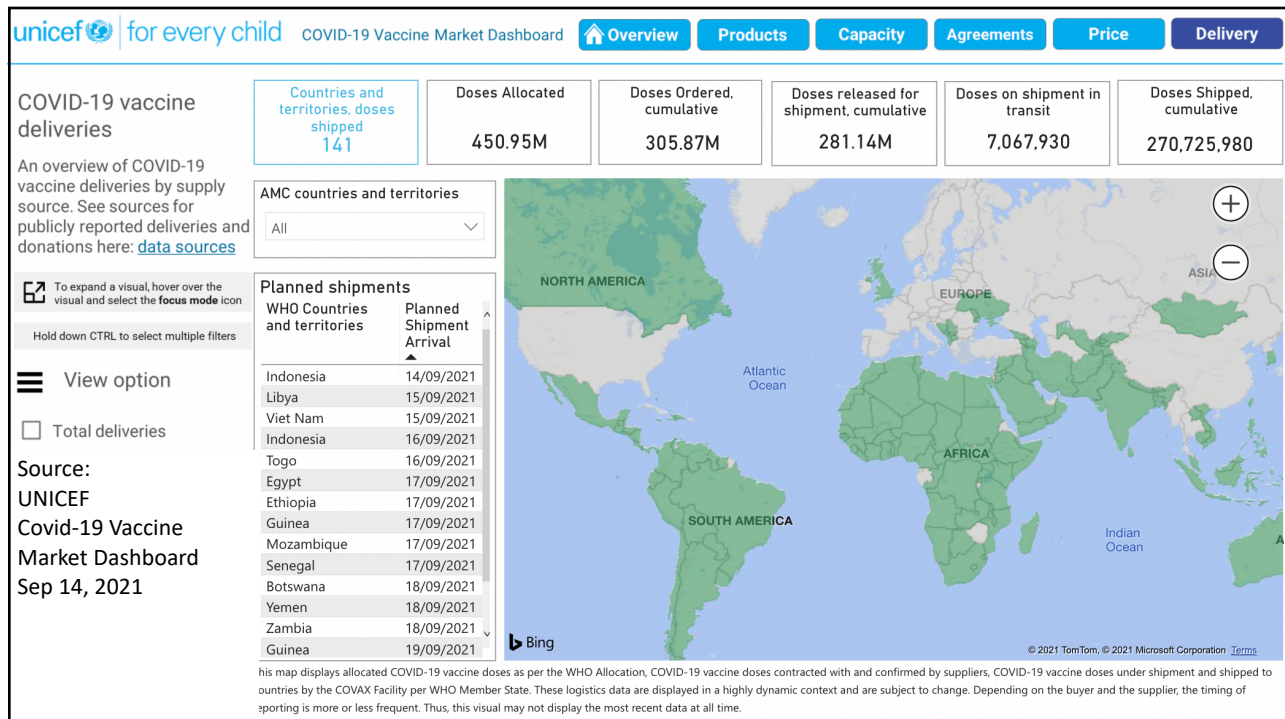


Source:  
Wikipedia  
Sep 14, 2021

86



87



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## Conclusion

- International trade is beneficial overall, but there are both winners and losers
- The pandemic has massively disrupted global trade, with even more winners and especially losers
- Some forms of trade – especially vaccines – are crucial for dealing with the pandemic

## Thank you!

**Thank you!**  
**Any Questions?**

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